Korean Distributor - 주식회사 셀코 (Cellkor Inc)
T. 02-6951-5302 Email: info@cellkor.com
F. 02-6951-5307 Web: www.cellkor.com

Monomers & Polymers

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Monodisperse Dendrimers

Polysciences stocks a wide portfolio of monomers. Such variety offers the synthetic chemist the tools to make a rich array of polymer compositions. Our Monomers Selection Guide organizes this set of reactive monomers into various groupings. These organized sets of data will enable the scientist to quickly determine which specific monomer can be used to synthesize custom polymers that meet their needs. In reviewing the data in these selection guides, you will be able to compare and contrast monomer alternatives quickly. More detailed information and chemical structures are included in the alphabetical listing which follows.

Polysciences also stocks a wide portfolio of polymers. This variety provides the formulation scientist a useful set of tools to design compositions with markedly different performance. These polymers can also be used by the synthetic scientist as platforms on which to build yet more complex polymer systems.

Acid Containing Monomers

Acidic groups are often used to convey solubility to polymers in aqueous media. These moieties can be converted to a wide range of alternative functional groups. Acid groups can be utilized as catalysts for chemical reactions. Additionally they are employed in polymers as a functional group which enables improved adhesion to a variety of substrates through hydrogen bonding or metal chelation.

	Polymerizable Sites	Polymerizable Synthon	Form of Acid	Special Features	Catalog #	Size	Page
Acrylic acid min. 99.0%	mono	acrylic	carboxylic acid	makes water soluble polymers	00020-250	250 g	210
Acrylic anhydride min. 90%	mono	acrylic	carboxylic acid (protected)	not a crosslinker	00488-50	50 g	210
tert-Butyl methacrylate	mono	acrylic	carboxylic acid (protected)	acid formed by thermal elimination of isobutylene, homopolymer, Tg = 107° C	02058-100	100 g	217
3-Butene-1,2,3-tricarboxylic acid	mono				01396-25	25 g	215
β-Carboxyethyl Acrylate, >98% Active	mono	acrylic	carboxylic acid	high purity, hydrophilic	24891-100	100 g	217
Methacrylic Acid, 99.9%	mono	acrylic	carboxylic acid	high purity, hydrophilic	24897-250	250 g	233
Methacrylic acid, min. 99.5%	mono	acrylic	carboxylic acid	offers latex stability, homo-polymer Tg = 185° C	00212-450	450 g	234
4-Methacryloxyethyl trimellitic anhydride	mono	acrylic	anhydride	hydrolyzed acid offers improved adhesion	17285-10	10 g	235
Methacryloyl-L-Lysine	mono	acrylic	amino acid	zwitterionic, can derivatize through acid or amine	24315-5	5 g	235
o-Nitrobenzyl methacrylate, min. 95%	mono	acrylic	carboxylic acid (protected)	acid formed by photolabile deprotection	24360-10	10 g	238
2-Propene-1-sulfonic acid, sodium salt, 35% soln. in water	mono	vinyl	sulfonic acid salt	water soluble	00064-10	10 g	243
2-Sulfoethyl methacrylate, >90%	mono	acrylic	sulfonic acid ester	water soluble	02597-50	50 g	245
Trichloroacrylic acid	mono	acrylic	carboxylic acid	carboxylic acid	02686-10	10 g	246
4-Vinylbenzoic acid	mono	styrenic	carboxylic acid	versatile -COOH synthesis handle, aromatic acid	04485-5	5 g	250

Acid Containing Monomers, Metal Salts

	Polymerizable Sites	Polymerizable Synthon	Form of Acid	Special Features			
Barium methacrylate, >95%	dual	acrylic	metal salt	metal salt	01994-50	50 g	212
Lithium methacrylate	mono	acrylic	metal salt	water soluble	17117-50	50 g	233
Magnesium acrylate	dual	acrylic	metal salt	ionic crosslinking, high Tg polymers	02467-10	10 g	233
Sodium acrylate	mono	acrylic	metal salt	can make high Tg salt polymers	01207-50	50 g	244
3-Sulfopropyl acrylate, potassium salt	mono	acrylic	sulfonic acid salt	water soluble	17209-100	100 g	245
3-Sulfopropyl methacrylate, potassium salt, 98%	mono	acrylic	sulfonic acid salt	water soluble	17210-100	100 g	245
Zinc (di)methacrylate	dual	acrylic	metal salt	ionomeric crosslinker	03011-100	100 g	252

Acrylic Monomers (Neutral, Monofunctional)

Monofunctional acrylics shape the type and nature of the main chain polymer backbone. Monomers are chosen to obtain the desired glass transition temperature, flexibility, mechanical strength, polarity and hydrophilic/hydrophobic character of the resulting polymer. Generally, acrylamides exhibit improved resistance to hydrolysis compared to acrylic/methacrylic esters.

	Homopolymer Tg (°C)	Special Features	Catalog #	Size	Page
N-Acryloylmorpholine	147	hydrophilic	21192-50	50 g	211
Benzhydryl methacrylate		high RI (ca 1.56), aromatic	24286-10	10 g	212
Benzyl acrylate, ~99%	6	high RI (ca 1.55), aromatic	01997-100	100 g	213
Benzyl methacrylate, min. 95%	54	high RI (ca 1.57), aromatic	02000-100	100 g	213
N-Benzylmethacrylamide		high RI (ca 1.60), aromatic	17969-25	25 g	213
2-n-Butoxyethyl methacrylate, ~99%		moderate polarity	02034-100	100 g	215
n-Butyl acrylate, min. 99%	-54	hydrocarbon building block monomer	02037-500	500 g	215
iso-Butyl methacrylate	53	hydrocarbon building block monomer	02056-500	500 g	216
n-Butyl methacrylate	20	hydrocarbon building block monomer	02059-3	3 kg	216
sec-Butyl acrylate	12	hydrocarbon building block monomer	02038-25	25 g	216
sec-Butyl methacrylate	60	hydrocarbon building block monomer	02057-10	10 g	216
tert-Butyl acrylate	43	hydrocarbon building block monomer	02039-250	250 g	217
tert-Butyl methacrylate	107	hydrophobic / protected acid	02058-100	100 g	217
4-Chlorophenyl acrylate	58	high RI (ca 1.55), chlorinated aromatic	01331-10	10 g	218
Cyclohexyl acrylate, min 85%	19	aliphatic, hydrophobic	02109-100	100 g	219
Cyclohexyl methacrylate, ~98%	83	aliphatic, hydrophobic	01837-100	100 g	219
iso-Decyl acrylate	-55	hydrophobic, low Tg	03008-100	100 g	219
n-Decyl methacrylate, 99%	-30	hydrophobic	23344-25	25 g	220
iso-Decyl methacrylate, min. 90%		hydrophobic	22493-100	100 g	220
N,N-Diethylacrylamide, min. 95%		polar building block	00871-25	25 g	221
N,N-Dimethylacrylamide, min. 98%	89	useful for chromatographic resins	02255-100	100 g	222
N,N-Dimethylmethacrylamide		hydrolytic stability, useful for hydrogels	02270-25	25 g	223
n-Dodecyl acrylate	-3	hydrophobic, long chain alkyl	02460-50	50 g	225
New! N-Dodecylacrylamide		hydrophobic, long chain alkyl	25723-5	5 g	225
N-Dodecylmethacrylamide	15	hydrophobic, hydrolytic stability	04135-10	10 g	225
n-Dodecyl methacrylate	-55	hydrophobic. Low Tg , long chain alkyl	02461-250	250 g	225
2-Ethylhexyl acrylate	-50	hydrophobic	00587-250	250 g	226
N-Ethylmethacrylamide		hydrolytic stability, useful for hydrogels	02322-10	10 g	226
2-(2-Ethoxyethoxy)ethyl acrylate	-70		02626-100	100 g	226
1-Hexadecyl methacrylate	22	hydrophobic, aliphatic	02396-25	25 g	228
n-Hexyl acrylate, min. 98%	-45	hydrophobic, aliphatic	02411-100	100 g	230
New! N-(Isobutoxymethyl)acrylamide			25998-50	50 ml	232
Methacryloxyethyl trimethylammonium			16639-100	100 g	235
2-Methoxyethyl acrylate	-50	low Tg monomer	02487-100	100 g	236
2-Methoxyethyl methacrylate, min.85%	16	moderate polarity	02488-100	100 g	236
Methyl methacrylate, min 99.5%	105	versatile building block monomer	00834-1	1 liter	236
2-Naphthyl acrylate	24	Hydrophobic, fluorescent, aromatic	06024-1	1 g	238
Neopentyl methacrylate		hydrophobic	06127-10	10 g	238
N-(n-Octadecyl)acrylamide		hydrophobic	04673-10	10 g	239
n-Octyl methacrylate, 99+%	-20	hydrophobic	23355-25	25 g	239
N-tert-Octylacrylamide		hydrophobic, hydrolytic stability	03141-25	25 g	239
Pentabromophenyl acrylate		high RI (ca 1.7), brominated, flame retardent	06344-10	10 g	239
Pentabromophenyl methacrylate		high RI (ca 1.7), brominated, flame retardent	04253-5	5 g	240
Pentafluorophenyl acrylate		perfluorophenyl, low surface energy	06349-5	5 g	240
Pentafluorophenyl methacrylate, 95%		perfluorophenyl, low surface energy	06350-5	5 g	240
2-Phenoxyethyl methacrylate	54	aromatic, hydrophobic	02640-100	100 g	241
Phenyl acrylate, min. 95%	57	UV absorbing, aromatic	02642-10	10 g	241

	Homopolymer Tg (°C)	Special Features	Catalog #	Size	Page
Phenyl methacrylate , >95%	110	moderate UV absorbing, aromatic, hydrophobic	02644-10	10 g	241
2-Phenylethyl acrylate, min. 92%	-3	moderate UV absorbing, aromatic, hydrophobic	02834-100	100 g	241
2-Phenylethyl methacrylate, min. 92%	26	moderate UV absorbing, aromatic, hydrophobic	02911-100	100 g	241
n-Propyl acrylate	-37	building block monomer	03132-25	25 g	244
n-Propyl methacrylate	35	building block monomer	03174-100	100 g	244
N-iso-Propylacrylamide	85	hydrophilic	02455-25	25 g	244
Stearyl acrylate	35	hydrophobic, can form crystal domains	02636-100	100 g	245
Stearyl methacrylate	38		02637-100	100 g	245
Tetrahydrofurfuryl acrylate	-12		02907-250	250 g	246
Tribromoneopentyl methacrylate		bromo non-aromatic	03057-10	10 g	246
2,4,6-Tribromophenyl acrylate		high RI (ca 1.6), brominated aromatic	03330-10	10 g	246
Triethylene glycol monomethyl ether monomethacrylate		hydrophilic	18556-500	500 g	247
3,3,5-Trimethylcyclohexyl methacrylate		aliphatic, bulky	02660-25	25 g	248
Undecyl methacrylate		hydrophobic	02544-25	25 g	249

Adhesion Promoting Monomers

Functional groups known to increase adhesion of polymers to surfaces include phosphate and carboxylic acids (metal adhesion) and silyl ethers (glass/siliceous adhesion) which hydrolyze to give reactive Si-OH bonds. While these monomers are well studied examples, many monomers having functional groups such as acids, amines and hydroxyls can also impart polymer adhesion to various substrates. Please refer to other tables for a more expansive listing of these monomers. Also see Amine Monomer section.

	Polymerizable Sites	Polymerizable Synthon	Add'l. Reactive Functionality	Special Features			
Acrylic acid min. 99.0%	mono	acrylic	carboxylic acid	acid provides metal adhesion	00020-250	250 g	210
Bis(2-methacryloxyethyl) phosphate	dual	acrylic	phosphate	crosslinking monomer with adhesion promoting capabilties, good for metals	16041-10	10 g	213
2-(Methacryloxy)ethyl phosphate	mono	acrylic	phosphate	used for introducing phosphorus into polymers, adhesion promoter	25422-50	50 ml	234
4-Methacryloxyethyl trimellitic anhydride	mono	acrylic	anhydride	adhesion promoter through anhydride	17285-10	10 g	235
3-Methacryloxypropyltrimethoxysilane	mono	acrylic	silyl ether	ethers react with glass surfaces to improve adhesion, glass pretreatment for polyacrylamide gels	02476-250	250 g	235
Monoacryloxyethyl phosphate	mono	acrylic	phosphate	used for introducing phosphorus into polymers, adhesion promoter	22468-10	10 g	237
Vinyltriethoxysilane	mono	vinyl	silyl ether	reactive silyl ethers hydrolyze affording bonding sites to siliceous surfaces	04537-50	50 g	251

Amine Containing Monomers

Amines are among the most widely versatile functional groups. In biopolymers, amines are the key synthetic handle to build structure and architecture to a polymer. Amine groups can act as base catalysts, can be quaternized to yield aqueous soluble polymers and can function as ligands to a variety of metals. Amines are good nucleophiles and can be converted to a wide set of functional groups. Amines can form salts with carboxylic and phosphoric acids to form biologically interesting complexes and structures.

	Polymerizable Sites	Polymerizable Synthon	Add'l. Reactive Functionality	Special Features	Catalog #	Size	Page
2-Acryloxyethyltrimethylammonium chloride	mono	acrylic	quaternary, HCl salt		17981-250	250 g	210
1-(Acryloyloxy)-3-(Methacryloyloxy)-2-Propanol	dual	acrylic			25351-50	50 ml	211
2-Aminoethyl methacrylate hydrochloride, min. 95%	mono	acrylic	primary, HCl salt		21002-10	10 g	211
N-(2-aminoethyl) methacrylamide hydrochloride	mono	acrylic	secondary, HCl salt		24833-5	5 g	211
N-(t-BOC-aminopropyl) methacrylamide	mono	acrylic	primary (protected)	solvent soluble for primary amine polymers	24318-10	10 g	212
N-(3-Aminopropyl)methacrylamide hydrochloride, >98%	mono	acrylic	primary, HCl salt		21200-5	5 g	212
2-(tert-Butylamino)ethyl methacrylate, min. 90%	mono	acrylic	secondary	homopolymer Tg = 33° C	01797-100	100 g	216
Diallylamine, min. 98%	dual	vinyl	secondary	form cyclopolymers	21424-100	100 g	221
Diallyldimethylammonium chloride, 65% soln. in water	dual	vinyl	quat	cationic polymers via cyclopolymerization	15912-100	100 g	221
4,4'-Diamino-3,3'-dinitrodiphenyl ether		amine		preparation of polyamides, polyimides	16685-10	10 g	221
3,3'-Diaminodiphenyl sulfone, min 98%		amine		preparation of polyamides, polyimides	21393-50	50 g	221
2-(N,N-Diethylamino)ethyl methacrylate	mono	acrylic	tertiary	homopolymer Tg = 20° C	01872-500	500 g	222
2-(Diethylamino)ethylstyrene, mixed m,p-isomers, min. 95%	mono	vinyl	tertiary		24100-5	5 g	222
2-Diisopropylaminoethyl methacrylate	mono	acrylic	tertiary		24263-10	10 g	222
2-(N,N-Dimethylamino)ethyl acrylate	mono	acrylic	tertiary		02257-500	500 g	223
2-(N,N-Dimethylamino)ethyl methacrylate, min. 99%	mono	acrylic	tertiary	homopolymer Tg = 19° C	00213-500	500 g	223
N-[2-(N,N-Dimethylamino) ethyl]methacrylamide	mono	acrylic	tertiary	hydrolytic stability	06172-5	5 g	223
N-[3-(N,N-Dimethylamino) propyl]acrylamide, min.95%	mono	acrylic	tertiary	homopolymer Tg = 19° C	22018-10	10 g	223
N-[3-(N,N-Dimethylamino) propyl]methacrylamide	mono	acrylic	tertiary	hydrolytic stability	09656-100	100 g	223
3-Dimethylaminoneopentyl acrylate	mono	acrylic	tertiary		17970-10	10 g	223
New! N-Dodecylacrylamide	mono	acrylic	secondary		25723-5	5 g	225
N-Dodecylmethacrylamide	mono	acrylic	secondary		04135-10	10 g	225
2-Methacryloxyethyltrimethylammonium chloride					16639-100	100 g	235
Methacryloyl-L-Lysine	mono	acrylic	amino acid	zwitterionic, can derivatize through acid or amine, water soluble	24315-5	5 g	235

	Polymerizable Sites	Polymerizable Synthon	Add'l. Reactive Functionality	Special Features	Catalog #	Size	Page
Methacryloylcholine methyl sulfate, 40% soln. in water					05810-100	100 g	236
2-N-Morpholinoethyl acrylate, 95%	mono	acrylic	tertiary		17977-100	100 g	237
2-N-Morpholinoethyl methacrylate, 95%	mono	acrylic	tertiary		17978-100	100 g	237

Crosslinking Acrylic Monomers – Difunctional

Difunctional monomers are useful for imparting crosslinking or branching sites to polymer architectures. The "spacer" group between the acrylic end groups often helps determine the physical and mechanical attributes of the resulting crosslinked polymer structure. Acrylic moieties are generally more reactive than methacrylic moieties and are thus used when faster reaction kinetics are desired (e.g. UV curable systems.)

	Add'l. Reactive Functionality	Special Features			
1-(Acryloyloxy)-3-(Methacryloyloxy)-2-Propanol	hydroxyl		25351-50	50 ml	211
Barium methacrylate, >95%	carboxylic acid	divalent metal atom salt	01994-50	50 g	212
2,2-Bis[4-(2-acryloxyethoxy)phenyl]propane	rigid hydrophibic, crosslinker	rigid, aromatic	04136-25	25 g	213
Bis(2-methacryloxyethyl) N,N'-1,9-nonylene biscarbamate		flexible, hydrophobic	21619-50	50 g	213
Bis(2-methacryloxyethyl) phosphate	phosphate	crosslinking monomer with adhesion promoting capabilities, good for metals	16041-10	10 g	213
2,2-Bis(4-methacryloxyphenyl)propane		rigid, hydrophobic	01381-25	25 g	213
Bisphenol A-bis(2-hydroxypropyl) acrylate		UV curable	25431-50	50 ml	214
1,4-Butanediol diacrylate, min. 85%		aliphatic	02049-100	100 g	214
1,3-Butanediol dimethacrylate, 98%		aliphatic	02047-500	500 g	215
1,4-Butanediol dimethacrylate, min. 90%		aliphatic	05973-250	250 g	215
Copper (II) methacrylate	carboxylic acid	divalent metal atom salt	21222-25	25 g	218
trans-1,4-Cyclohexanediol dimethacrylate		rigid, aliphatic	18912-10	10 g	219
N,N'-Cystaminebisacrylamide, Electro Pure™	disulfide	reversible crosslinking	09809-5	5 g	219
1,10-Decanediol dimethacrylate		flexible, aliphatic, long chain	02140-25	25 g	219
1,4-Diacryloylpiperazine		rigid	21190-10	10 g	220
N,N-Diallylacrylamide	acrylic		01848-10	10 g	221
Diethylene glycol diacrylate		hydrophilic	02215-100	100 g	222
Diethylene glycol dimethacrylate		hydrophilic	02214-100	100 g	222
2,2-Dimethylpropanediol dimethacrylate		aliphatic	02276-100	100 g	223
N, N' Ethylene Bisacrylamide		hydrogel crossslinker	09811-1	1 g	225
Ethylene glycol diacrylate		UV curable, acrylate	02302-25	25 g	225
Ethylene glycol dimethacrylate, 99.7%		hydrophilic, high purity	24896-250	250 g	226
Ethylene glycol dimethacrylate, min 88%		hydrophilic	02303-250	250 g	226
Ethylene glycol dimethacrylate, min 98%		hydrophilic	24030-250	250 g	226
Fluorescein dimethacrylate		fluorescent	23589-100	100 mg	226
1,3-Glyceryl dimethacrylate		hydrophilic	25420-50	50 ml	227
N,N'-Hexamethylenebisacrylamide		hydrolytic stability	01495-5	5 g	230
1,6-Hexanediol diacrylate		aliphatic	23671-100	100 g	230
1,6-Hexanediol dimethacrylate, min 98%		aliphatic	23672-100	100 g	230
2,2-Bis[4-(2-hydroxy-3-methacryloxypropoxy) phenyl]propane		rigid, aromatic	03344-100	100 g	230
Lead acrylate			02968-100	100 g	233
Magnesium acrylate	carboxylic acid	divalent metal atom salt	02467-10	10 g	233
N,N'-Methylenebisacrylamide, Chemzymes®; Ultra Pure, Purity >99%		hydrogel crosslinker	00719-100	100 g	236
1,9-Nonanediol dimethacrylate		flexible, aliphatic	00801-10	10 g	238

	Add'l. Reactive Functionality	Special Features	Catalog #	Size	Page
1,5-Pentanediol dimethacrylate		aliphatic	04260-25	25 g	240
1,4-Phenylene diacrylate		rigid, aromatic	06389-10	10 g	241
Tetraethylene glycol dimethacrylate		aliphatic	02654-50	50 g	246
Tricyclodecane dimethanol diacrylate			25110-50	50 g	247
Triethylene glycol diacrylate		UV curable, acrylate > methacrylate	02655-250	250 g	247
Triethylene glycol dimethacrylate			01319-250	250 g	247
		aliphatic	24034-100	100 g	247
Zinc (di)methacrylate	carboxylic acid	ionomeric crosslinker	03011-100	100 g	252

Crosslinking Acrylic Monomers – Multifunctional

Typically used for generating highly crosslinked polymer structures, these monomers increase polymer toughness, modulus and solvent resistance. For UV curable formulations, multifuntional acrylates are typically faster reacting than their methacrylate analogs.

	Polymerizable Sites	Add'l. Reactive Functionality	Special Features			
Dipentaerythritol pentaacrylate (mixture of tetra-, penta-, hexaacrylate)	multiple		high crosslinking efficiency	16311-500	500 g	224
Pentaerythritol tetraacrylate	multiple			01547-100	100 g	240
Pentaerythritol triacrylate	tri	hydroxyl	multifunctional crosslinker	04259-100	100 g	240
PEO(5800)-b-PPO(3000)-b-PEO(5800) dimethacrylate	di			25430-1	1 g	243
[PEO(10700)-b-PPO(4500)] 4-ethylenediamine tetramethacrylate	tetra			25429-1	1 g	243
1,1,1-Trimethylolpropane triacrylate	tri		useful for UV cure	02658-250	250 g	249
1,1,1-Trimethylolpropane trimethacrylate	tri		useful for UV cure	02659-250	250 g	249

Dual Reactive Acrylic Monomers

It is often desirable to synthesize polymer architectures that are capable of further reaction to incorporate new functionality, graft new polymer chains, attach drugs or biomolecules, or make the polymer respond intelligently to changes in its environment. This diverse set of monomers have easily polymerizable carbon-carbon double bonds yet contain a secondary reactive group that can be elaborated in a multitude of ways. Some reactive groups e.g., carboxylic acid in o-nitrobenzyl methacrylate (Cat. #24360) are masked and are revealed by simple deprotection schemes.

	Add'l. Reactive Functionality	Special Features			
Acrylic anhydride min. 90%	anhydride (protected)	allows formulation of cyclic anhydrides	00488-50	50 g	210
4-(2-Acryloxyethoxy)-2-hydroxybenzophenone	phenol	benzophenone is a strong UV absorber, potential UV radical initiator	19931-10	10 g	210
N-Acryloxysuccinimide	ester (protected)	derivitization through ester link using mild reaction conditions, good for biologically active compounds	19930-1	1 g	210
Allyl methacrylate	olefin	allyl double bond is less reactive than methacrylate, good for post polymerization reactions	01643-500	500 g	211
2-Aminoethyl methacrylate hydrochloride, min. 95%	amine (as HCl salt)	can be used to prepare polymers with amine functionality	21002-10	10 g	211
N-(t-BOC-aminopropyl)methacrylamide	amine (protected)	t-BOC easily deprotected tp yield primary amine	24318-10	10 g	212
N-(3-Aminopropyl)methacrylamide hydrochloride, >98%	amine (as HCl salt)	can be used to prepare polymers with amine functionality	21200-5	5 g	212
2-Bromoethyl acrylate, min. 95%	halogen	allows synthesis of heavy atom polymers, Br can be displaced with various nucleophiles	02015-10	10 g	214
2-(tert-Butylamino)ethyl methacrylate, min. 90%	amine (secondary)	builds polymers with secondary amines, potential H-bonding site	01797-100	100 g	216

	Add'l. Reactive Functionality	Special Features	Catalog #	Size	Page
tert-Butyl acrylate	carboxylic acid (protected)	used in photoresist formulations	02039-250	250 g	217
2-Cinnamoyloxyethyl acrylate	α,β unsat. ester	photocrosslinking monomer	24014-10	10 g	218
Cinnamyl methacrylate	functionalized styrene	photocrosslinking monomer	02092-5	5 g	218
2-Cyanoethyl acrylate	nitrile	polar building block monomer, can use nitrile for functionalization	01829-100	100 g	219
N,N-Diallylacrylamide	allyl	crosslinking monomer	01848-10	10 g	221
Dicyclopentenyloxyethyl acrylate	ethenyl	endo cyclic olefin does not readily polymerize, can be post reacted e.g. oxidative crosslinking	15797-25	25 g	221
Glycerol monomethacrylate, mixture of isomers	hydroxyl	isomer mixture, useful in hydrogel preparation, -OH can be functionalized in multiple ways	04180-25	25 g	227
Glycidyl methacrylate	epoxide	versatile, introduces reactive sites into polymers, can be derivatized in post polymerization reactions with various nucleophiles	02607-500	500 g	227
2-Hydroxyethyl acrylate	hydroxyl	hydrophilic monomer building block	01902-250	250 g	231
Hydroxypropyl methacrylate, mixture of isomers	hydroxyl	hydrophilic monomer building block, can be post reacted through hydroxyl	00730-500	500 g	232
N-(2-Hydroxypropyl)methacrylamide	hydroxyl	hydrophilic monomer building block, can be post reacted through hydroxyl group	08242-10	10 g	232
3-Methacryloxypropyltrimethoxysilane	silyl ether	ethers react with silaceous surfaces to improve adhesion, glass pretreatment for polyacrylamide gels	02476-250	250 g	235
Methacryloyl chloride, min. 80%	halogen	reactive building block monomer. Also used to prepare other specialty monomers	01518-50	50 g	235
Methacryloyl fluoride	halogen	reactive building block monomer. Also used to prepare other specialty monomers	17414-25	25 g	235
Methyl 2-cyanoacrylate	cyano	used in rapidly setting cements and adhesives	01520-10	10 g	236
N-Methylolacrylamide, 48% soln. in water		acid catalyzed post polymerization, crosslinking capabilties	02518-250	250 g	237
Monoacryloxyethyl phosphate	phosphate	used for introducing phosphorus into polymers, adhesion promoter	22468-10	10 g	237
o-Nitrobenzyl methacrylate, min. 95%	carboxylic acid (protected)	nitrobenzyle ester removed by UV irradiation to afford carboxylic acid, used for catalysis, photoresists and latent reactive acid	24360-10	10 g	238
N-(Phthalimidomethyl)acrylamide	active methylene	used in photoresist formulations	19390-25	25 g	241
Propargyl acrylate	acetylenic	acetylenic group can be post functionalized, possible oxidative crosslinking monomer	02964-25	25 g	243
Propargyl methacrylate	acetylenic	acetylenic group can be post functionalized, possible oxidative crosslinking monomer	02965-25	25 g	243
Tricyclodecane dimethanol diacrylate			25110-50	50 g	247

Epoxides / Anhydrides / Imides

Unlike ethylenic monomers which polymerize through free radical processes, epoxide resins react with amines, carboxylic acids, anhydrides, etc. to form polymers displaying a range of characteristics from tough and durable to soft and adhesive.

	Polymerizable Sites	Special Features			
Allyl glycidyl ether	mono	can react either epoxide or allyl group into polymers	19191-50	50 g	211
4,4'-Bisphenol A Bis-(N-Methylphthalimide)	dual	useful monomer for synthesis of high temp. polymers	24284-25	25 g	214
4,4'-Bisphenol A Dianhydride	dual	useful monomer for synthesis of high temp. polymers	24283-25	25 g	214

	Polymerizable Sites	Special Features	Catalog #	Size	Page
1,4-Butanediol diglycidyl ether	dual	can be used for post polymerization corsslinking of amine polymers	01795-50	50 g	215
Ethylene glycol diglycidyl ether (Quetol 651)	dual	active crosslinking monomer for active nucelophiles, hydrophilic, used for hydrogels	01479-100	100 g	225
Glycidyl butyl ether	mono	used in epoxy reactions as monofunctional diluent	05678-500	500 g	227
Glycidyl cinnamate	mono	polymerized with various carboxylic acids, alcohols and amines, Olefin moiety can be photocrosslinked	16090-10	10 g	227
Glycidyl Glycerol-Ether, Polyfunctional	multiple	isomer mixture, efficient crosslinking monomer for various nucleophilic agents	09221-50	50 g	227
Glycidyl nonylphenyl ether	mono	epoxy functional	18236-100	100 g	227
Methacrylic anhydride		uncrosslinked	01517-100	100 ml	234
Propylene glycol diglycidyl ether	dual	versatile crosslinker for amine, hydroxyl and carboxylate systems	24044-100	100 g	244
Propylene Oxide, EM Grade	mono	basic building block monomer for water dispersible polymers	00236-1	1 pint	244
Triglycidyl isocyanurate	tri	crosslinking monomer for epoxy, urethane systems	16173-50	50 g	248

Fluorescent Acrylic Monomers

Monomers with fluorescent tags are often used to build polymers that can be detected at very low concentrations using fluorescence spectroscopy. Polymer migration and diffusion has been studied using fluorescent tags. Polymer microspheres containing fluorescent groups are used routinely for flow cytometry and medical diagnostic assays.

	Monomer Type	Special Features			
Acryloxyethyl thiocarbamoyl Rhodamine B		Ex. max = 548 nm, Em. max = 570 nm	25404-100	100 mg	216
9-Anthracenylmethyl methacrylate	neutral	Ex. max = 362 nm, Em. max = 407 nm, yellow crystals	23587-100	100 mg	212
3,8-Dimethacryloyl ethidium bromide	ionic	Ex. max = 439 nm, Em. max = 512 nm, Insoluble in water	23590-100	100 mg	222
Fluorescein dimethacrylate	neutral	Ex. max = 470 nm, Em. = 511 nm	23589-100	100 mg	226
Methacryloxyethyl thiocarbamoyl rhodamine B	ionic, mixture isomers	Ex. max = 548 nm, Em. max = 570 nm, purple crystals	23591-100	100 mg	234
2-Naphthyl acrylate	neutral	Hydrophobic, fluorescent monomer	06024-1	1 g	238
2-Naphthyl methacrylate	neutral	Ex. max = 285 nm, Em. min = 345 nm	23602-100	100 mg	238
Nile Blue Acrylamide		Em. max = 674 nm in H2O, dark blue crystals	25395-100	100 mg	238
1-Pyrenylmethyl methacrylate	neutral	Ex. max = 339 nm, Em. max = 394 nm, pale yellow crystals	23588-100	100 mg	244

Fluorinated Acrylic Monomers

Monomers containing fluorine provide polymers with unique low energy surfaces. Materials made from these monomers are typically chemical resistant and very hydrophobic.

	Homopolymer Tg (°C)	Special Features	Catalog #	Size	Page
1H,1H,7H-Dodecafluoroheptyl methacrylate	13	low RI (ca 1.36), aliphatic	00767-25	25 g	224
1H,1H,2H,2H-Heptadecafluorodecyl acrylate	0	low RI (ca 1.34)	19227-25	25 g	228
1H,1H,2H,2H-Heptadecafluorodecyl methacrylate	40	low RI (ca 1.35)	19226-25	25 g	228
1H,1H-Heptafluorobutyl acrylate	-30	low RI (ca 1.37)	21039-25	25 g	228
1H,1H,3H-Hexafluorobutyl acrylate	-22	low RI (ca 1.39)	05631-10	10 g	229
1H,1H,3H-Hexafluorobutyl methacrylate		low RI (ca 1.40)	05632-10	10 g	229
Bis-(1,1,1,3,3,3-Hexafluoroisopropyl) Itaconate			24971-25	25 g	229
1,1,1,3,3,3-Hexafluoroisopropyl Acrylate			24970-25	25 g	229
Hexafluoro-iso-propyl methacrylate		low RI (ca 1.38)	02401-10	10 g	229
1H,1H,5H-Octafluoropentyl acrylate	-35	low RI (ca 1.38)	21044-25	25 g	239
1H,1H,5H-Octafluoropentyl methacrylate, min. 98%	36	low RI (ca 1.39)	21045-25	25 g	239
Pentafluorophenyl acrylate		perfluorophenyl, low surface energy	06349-5	5 g	240
Pentafluorophenyl methacrylate, 95%		perfluorophenyl, low surface energy	06350-5	5 g	240
1H,1H,3H-Tetrafluoropropyl methacrylate		low RI (ca 1.4), aliphatic	07577-25	25 g	246
2,2,2-Trifluoroethyl acrylate	-10	low RI (ca 1.44), aliphatic	01718-25	25 g	247
2,2,2-Trifluoroethyl methacrylate	80	low RI (ca 1.41), aliphatic	02622-25	25 g	247
Bis-(2,2,2-Trifluoroethyl) Itaconate			24972-25	25 g	248

High / Low Refractive Index Monomers

Polymers that interact with light can be modified by optimizing their refractive index properties. These materials are useful in many types of optical applications: lenses, optical switches, optical fiber coatings, etc. Low RI monomers are typically highly fluorinated. Polymers using perfluorinated monomers are often hydrophobic and exhibit very low surface energies.

	Polymerizable Sites	Homopolymer Tg (°C)	Special Features			
Allyl Phenyl Ether, 98%	vinyl		high RI (ca 1.52), hydrophobic	24894-100	100 g	211
Benzyl acrylate, ~99%	acrylic	6	high RI (ca 1.55), non-halogenated	01997-100	100 g	213
Benzyl methacrylate, min. 95%	acrylic	54	high RI (ca 1.57), non-halogenated	02000-100	100 g	213
N-Benzylmethacrylamide	acrylic		high RI (ca 1.60), non-halogenated	17969-25	25 g	213
2-(9H-Carbazole-9-yl) ethyl methacrylate	acrylic		high RI (ca 1.69)	24372-1	1 g	217
4-Chlorophenyl acrylate	acrylic	58	high RI (ca 1.55), chlorinated aromatic	01331-10	10 g	218
3-Chlorostyrene, 98%		90	high RI (ca 1.57)	02042-5	5 g	218
1H,1H,7H-Dodecafluoroheptyl methacrylate	acrylic	13	low RI (ca 1.36), fluorinated aliphatic	00767-25	25 g	224
1H,1H,2H,2H-Heptadecafluorodecyl acrylate	acrylic	0	low RI (ca 1.34), fluorinated	19227-25	25 g	228
1H,1H,2H,2H-Heptadecafluorodecyl methacrylate	acrylic	40	low RI (ca 1.35), fluorinated	19226-25	25 g	228
1H,1H-Heptafluorobutyl acrylate	acrylic	-30	low RI (ca 1.37), fluorinated	21039-25	25 g	228
1H,1H,3H-Hexafluorobutyl acrylate	acrylic	-22	low RI (ca 1.39), fluorinated	05631-10	10 g	229
1H,1H,3H-Hexafluorobutyl methacrylate	acrylic		low RI (ca 1.40), fluorinated	05632-10	10 g	229
Hexafluoro-iso-propyl methacrylate	acrylic		low RI (ca 1.38), fluorinated	02401-10	10 g	229
1H,1H,5H-Octafluoropentyl acrylate	acrylic	-35	low RI (ca 1.38), fluorinated	21044-25	25 g	239

	Polymerizable Sites	Homopolymer Tg (°C)	Special Features	Catalog #	Size	Page
1H,1H,5H-Octafluoropentyl methacrylate, min. 98%	acrylic	36	low RI (ca 1.39), fluorinated	21045-25	25 g	239
Pentabromophenyl acrylate	acrylic		high RI (ca 1.7), brominated, flame retardant, aromatic	06344-10	10 g	239
Pentabromophenyl methacrylate			high RI (ca 1.7), brominated, flame retardant, aromatic	04253-5	5 g	240
1H,1H,3H-Tetrafluoropropyl methacrylate	acrylic		low RI (ca 1.4), fluorinated aliphatic	07577-25	25 g	246
2,4,6-Tribromophenyl acrylate	acrylic		high RI (ca 1.6), brominated aromatic	03330-10	10 g	246
2,2,2-Trifluoroethyl acrylate	acrylic	-10	low RI (ca 1.44), fluorinated aliphatic	01718-25	25 g	247
2,2,2-Trifluoroethyl methacrylate	acrylic	80	low RI (ca 1.41), fluorinated aliphatic	02622-25	25 g	247
N-Vinylcarbazole	vinyl		high RI (ca 1.68)	02429-25	25 g	250

Hydroxy Containing Monomers

Hydroxyl groups have utility as hydrogen bonding sites and can provide polymers with compatibility for water or polar solvents. These versatile functional groups can be derivitized broadly. Polymers containing free –OH groups can be post reacted with acids, epoxies, isocyanates, etc. to create novel polymer properties and architectures.

	Polymerizable Sites	Polymerizable Synthon	Add'l. Reactive Functionality	Special Features			
4-(2-Acryloxyethoxy)-2-hydroxybenzophenone	mono	acrylic	phenol	UV absorbing, aromatic	19931-10	10 g	210
4-tert-Butoxystyrene, min. 99%	mono	styrene	phenol (protected)	deprotect with heat	21760-10	10 g	215
Glycerol monomethacrylate, mixture of isomers	mono	acrylic	hydroxyl	isomer mixture, useful in hydrogel preparation	04180-25	25 g	227
(HEMA 10) Poly Ethoxy (10) ethyl methacrylate	mono	acrylic	hydroxyl	hydrophilic	24890-100	100 g	228
2-hydroxy-3-chloropropyl methacrylate	mono	acrylic	hydroxyl		25421-50	50 ml	230
2-Hydroxyethyl acrylate	mono	acrylic	hydroxyl	hydrophilic monomer building block, homopolymer Tg = 15° C	01902-250	250 g	231
Hydroxypolyethoxy (10) Allyl Ether, 98%	mono	vinyl	hydroxyl	hydrophilic	24899-100	100 g	232
Hydroxypropyl methacrylate, mixture of isomers	mono	acrylic	hydroxyl	aliphatic	00730-1	1 kg	232
N-(2-Hydroxypropyl) methacrylamide	mono	acrylic	hydroxyl	hydrolytic stability	08242-10	10 g	232
2-methacryloxyethyl phenyl urethane (MAPU)	mono	acrylic			25507-100	100 g	234
3-Phenoxy 2 hydroxy propyl methacrylate (PHPM)	mono	acrylic	hydroxyl		25506-100	100 g	240
Sodium 1-Allyloxy-2 hydroxypropyl Sulfonate				sulfonate salt	24898-100	100 g	245
1,1,1-Trimethylolpropane diallyl ether	mono	vinyl	hydroxyl	hydrophilic crosslinker	05500-50	50 g	248
1,1,1-Trimethylolpropane monoallyl ether	mono	vinyl	hydroxyl	hydrophilic crosslinker	15914-50	50 g	248

Mono and Difunctional Glycol Oligomeric Monomers

Ethylene glycol units are strongly hydrophilic through their multiple H-bonding sites. Monomers of this type are useful in the construction of hydrogels and water compatible polymer structures. New research suggests that bioactive molecules e.g. drugs with attached PEG chains have improved bioavailablity characteristics.

	Polymerizable Synthon (Sites)	Add'l. Reactive Functionality	Approx. # of Glycol Groups	Approx. MW	Special Features	Catalog #	Size	Page
Poly(ethylene glycol) (n) diacrylate	acrylic (2)	none	4 to 6	314	hydrophilic cross-linking monomer	00669-250	250 g	242,289
	acrylic (2)	none	8 to 10	500	hydrophilic cross-linking monomer	01871-250	250 g	242,289
	acrylic (2)	none		1,000		25485-1	1 g	242
	acrylic (2)	none	90 to 100	4,100	hydrophilic cross-linking monomer	15246-1	1 g	242,289
Poly(ethylene glycol) (n) dimethacrylate	methacrylic (2)	none	4 to 6	350	hydrophilic cross-linking monomer	00096-100	100 g	242,289
	methacrylic (2)	none	8 to 10	550		15179-100	100 g	242,289
	methacrylic (2)	none	13 to 15	750		02364-100	100 g	242,289
	methacrylic (2)	none	21 to 25	1,150		15178-100	100 g	242,289
		none	~ 182	8,000		25428-2	2 g	242,289
		none	~ 450	20,000		25406-5	5 g	242,289
Poly(ethylene glycol) (n) monomethacrylate	methacrylic (1)	hydroxy	4 to 6	270	long chain monomer, more polar than PO analog, can post react -OH to add additonal functionality	16712-100	100 g	242,290
	methacrylic (1)	hydroxy	8 to 10	480		16713-100	100 g	242,290
	methacrylate (1)	hydroxy	~ 45	2,000		25427-1	1 g	242
Poly(ethylene glycol) (n) monomethyl ether monomethacrylate	methacrylic (1)	none	4 to 6	280	adds hydrophilic grafts to polymers; adds long chain hydrophilic graft to polymer chain	16664-100	100 g	242
	methacrylic (1)	none	8 to 10	490		16665-100	100 g	242
	methacrylic (1)	none	21 to 25	1,090		16666-100	100 g	242
	methacrylic (1)	none	~ 43	1,900		25425-1	1 g	243
	methacrylic (1)	none	~ 114	5,000		25426-1	1 g	243
Poly(propylene glycol) dimethacrylate	methacrylic (2)	none	5 to 7	550	less polar than EO analog, insoluble crosslinker	04380-250	250 g	243

Styrenic Monomers

Popular alternatives to acrylic and related monomers, styrenic monomers generally provide polymers of higher glass transition temperature, higher modulus, increased hydrophobic character and nominal UV absorbance. As such, coatings made with high concentrations of styrenic monomers can yellow with time if exposed to UV light. Crosslinked styrene resins (especially in microsphere form) are tough and chemically resistant. These form the basis for ion exchange resins and microbeads used as supports for biochemical reactions.

	Monomer Type	Add'l. Reactive Functionality	Homopolymer Tg (°C)	Special Features	Catalog #	Size	Page
4-tert-Butoxystyrene, min. 99%	protected group	phenol		deprotection gives phenol	21760-10	10 g	215
4-(tert-Butyl)styrene, 95%	neutral		132	high Tg monomer	02606-25	25 g	216
4-Chloromethylstyrene	reactive	halogen		Merrifield resin building block	22193-25	25 g	217
Chloromethylstyrene, 43% para, 57% meta, ~96%	reactive	halogen		Merrified resin building block	02718-500	500 g	218
3-Chlorostyrene, 98%			90	high RI (ca 1.57)	02042-5	5 g	218
2-(Diethylamino)ethylstyrene, mixed m,p-isomers, min. 95%				amine functional styrene monomer	24100-5	5 g	222
Divinylbenzene					01892-100	100 g	224
	neutral	vinyl		aromatic, rigid crosslinker	22478-100	100 g	224
2-Methylstyrene	neutral		120	aromatic, hydrophobic	04581-5	5 g	237
4-Methylstyrene	neutral		108	aromatic, hydrophobic	04234-100	100 g	237
4-Nitrostyrene	reactive	nitro		nitro can be reduced to amine	02634-5	5 g	238
Styrene	neutral		100		00660-500	500 g	245
4-Vinylbenzoic acid	reactive	carboxylic acid		amine aromatic, versatile -COOH synthesis handle	04485-5	5 g	250

Sulfonate Containing Monomers

	Polymerizable Sites	Polymerizable Synthon	Form of Acid	Special Features			
2-Sulfoethyl methacrylate, >90%	mono	acrylic	sulfonic acid	water soluble	02597-50	50 g	245
3-Sulfopropyl methacrylate, potassium salt, 98%	mono	acrylic	sulfonic acid salt	water soluble	17210-100	100 g	245
3-Sulfopropyldimethyl-3-methacrylamidopropylammonium, inner salt				zwitterionic detergent and crosslinker	16570-5	5 g	245

UV (light) Active Monomers

Polymers with aliphatic backbones often show little absorbance of light and usually do not absorb in the near and mid UV spectral range. UV absorbing monomers improve the capture of light at these wavelengths. These absorbers can be used to shield the polymer system or an underlying substrate from degradation by UV light, e.g. phenethyl methacrylate containing polymers for optical lenses. Additionally, some UV absorbing materials can act as sensitizers to promote photochemical reactions.

	Polymerizable Synthon	Add'l. Reactive Functionality	Homopolymer Tg (°C)	Special Features			
2(5-Benzotriazolyl 3-t-butyl 4-methacryloxy)phenyl propionic acid, isooctyl ester	acrylic	α,β unsat.		UV absorber	24241-1	1 g	212
2-Cinnamoyloxyethyl acrylate	acrylic	α,β unsat.		photocrosslinking monomer	24014-10	10 g	218
Cinnamyl methacrylate	acrylic	α,β unsat.		photocrosslinking monomer	02092-5	5 g	218

	Polymerizable Synthon	Add'l. Reactive Functionality	Homopolymer Tg (°C)	Special Features	Catalog #	Size	Page
Glycidyl cinnamate	epoxide	ethenyl		polymerized with various carboxylic acids, alcohols and amines, Olefin moiety can be photocrosslinked	16090-10	10 g	227
2-(2'-Hydroxy-5'-methylphenyl)-benzotriazole				UV absorber	21363-25	25 g	230,292
2-(2'-Methacryloxy-5'-methylphenyl)benzotriazole	acrylic			UV absorber	21871-25	25 g	235
Phenyl acrylate, min. 95%	acrylic		57	UV absorbing, aromatic	02642-10	10 g	241
Phenyl methacrylate, >95%	acrylic		110	moderate UV absorbing, aromatic, hydrophobic	02644-10	10 g	241
2-Phenylethyl acrylate, min. 92%	acrylic		-3	moderate UV absorbing, aromatic, hydrophobic	02834-100	100 g	241
2-Phenylethyl methacrylate, min. 92%	acrylic		26	moderate UV absorbing, aromatic, hydrophobic	02911-100	100 g	241
N-(Phthalimidomethyl) acrylamide	acrylic			used in photoresist formulations	19390-25	25 g	241

Vinyl and Ethenyl Monomers

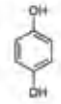
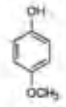
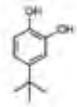
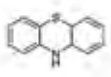
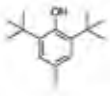
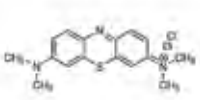
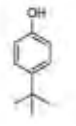
An alternative choice to styrenics and acrylics, these monomers are often used to create polymers with inert main chain features. Many of these monomers can be polymerized via metallocene or other metal mediated polymerization processes.

	Polymerizable Sites	Add'l. Reactive Functionality	Special Features			
Acrolein, distilled, 99% EM grade	mono	aldehyde		00016-5	5 x 10 ml	210
Allyl glycidyl ether	mono	epoxide	can react either epoxide or allyl groups into polymers	19191-50	50 g	211
2,2-Bis[4-(2-acryloxyethoxy) phenyl]propane	dual	rigid crosslinker	rigid, aromatic	04136-25	25 g	213
3-Butene-1,2,3-tricarboxylic acid	mono			01396-25	25 g	215
Diallyl Maleate	dual vinyl	vinyl	hydrophilic	02156-250	250 g	220
Diallyl Maleate–99% Active	dual vinyl	vinyl	hydrophilic	24892-100	100 g	220
Diallyl phthalate, practical	dual			02159-1	1 kg	220
Diallylamine, min. 98%	dual	amine (secondary)	forms cyclopolymers	21424-100	100 g	221
Diallyldimethylammonium chloride, 65% soln. in water	dual		cationic polymers via cyclopolymerization	15912-100	100 g	221
3-Isopropenyl-α,α-dimethylbenzyl Isocyanate	mono	isocyanate		19706-100	100 g	222
Divinyl Adipate	dual			25338-100	100 g	224
Divinyl glycol	dual			18252-25	25 g	224
Divinyl sebacate	dual			04632-5	5 g	224
N-methyl N-vinyl acetamide	mono		hydrophilic	22065-25	25 g	236
2-Propene-1-sulfonic acid, sodium salt, 35% soln. in water	mono		water soluble, sulfonic acid, Na salt	00064-10	10 g	243
Triallyl cyanurate	tri			01236-100	100 g	246
Triethylene glycol divinyl ether	dual			19560-100	100 g	247
1,1,1-Trimethylolpropane diallyl ether	multi	hydroxyl	hydrophilic crosslinker	05500-50	50 g	248

	Polymerizable Sites	Add'l. Reactive Functionality	Special Features	Catalog #	Size	Page
1,1,1-Trimethylolpropane mono-allyl ether	mono	hydroxyl	hydrophilic crosslinker	15914-50	50 g	248
N-vinyl acetamide (NVA)	mono			24806-50	50 g	249
Vinyl azlactone	mono			21329-5	5 g	249
Vinyl benzoate	mono			02664-50	50 g	250
Vinyl butyrate	mono			02835-10	10 g	250
N-Vinylcaprolactam, min. 98%	mono			16818-10	10 g	250
N-Vinylcarbazole	mono		high RI (ca 1.68)	02429-25	25 g	250
Vinylferrocene	mono		iron complex	04503-1	1 g	250
Vinyl 2-furoate	mono			02829-10	10 g	250
1-Vinylimidazole	mono			01726-100	100 g	251
Vinyl octadecyl ether	mono		hydrophobic	01728-100	100 g	251
4-Vinylpyridine	mono			02668-100	100 g	251
N-Vinyl-2-pyrrolidone	mono		hydrophilic	04000-250	250 g	251
Vinyl stearate, min. 95%	mono			01784-100	100 g	251
Vinyltriethoxysilane	mono	silyl ether	reactive silyl ethers hydrolyze affording bonding sites to silaceous surfaces, adhesion promoter	04537-50	50 g	251
Vinyltriphenylsilane				21543-10	10 g	252

Polymerization Inhibitors for Monomers

Throughout the Monomer section, we list monomers which are inhibited with a variety of polymerization inhibitors. These inhibitors are chosen for effectiveness, and minimum color formation on storage. Below is a table identifying the inhibitors used and their structures.

Inhibitor	Chemical Name	Structure	Inhibitor	Chemical Name	Structure
HQ	Hydroquinone		Triethylene diamine (DABCO®)	2,4-Diazabicyclo[2.2.2] octane	
MEHQ	Hydroquinone monomethyl ether		t-Butylcatechol	4-t-butylcatechol	
PTZ	Phenothiazine		BHT(butylated hydroxytoluene)	2,6-di-t-Butyl-4-methyl-phenol	
Methylene Blue	3,7-Bis(dimethylamino) -phenazathionium chloride		p-t-Butylphenol	4-t-Butylphenol	

NOTES

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	Catalog #	Size
A		
Acrolein, distilled, 99% EM grade [107-02-8] *BCOPR6acg* MW 56.1 bp 52–53° n_D^{20} 1.4025 1000 ppm HQ TSCA $H_2C=CHCHO$ Used in combination with other aldehydes such as formaldehyde or glutaraldehyde to fix very dense specimens since acrolein penetrates and reacts faster than other fixatives. Distilled and packaged in serum vials for easy handling. Requires Poison Pack *J. Histochem. Cytochem., 30, 1307 (1982)*	00016-5	5 x 10 ml
Acrylamide, Chemzymes Ultra Pure® [79-06-1] *HMO6d* MW 71.08 mp 84–85° Tg 165° uninhibited TSCA $H_2C=CHCONH_2$ Specific conductance of 35% (w/v) solution 2μmho/cm. Used in electrophoresis for separation of nucleic acid fragments and proteins. For introduction of hydrophilic sites, preparation of water-soluble polymers and in electrophoresis. Technical Data Sheet #155	00019-100 00019-500	100 g 500 g
Acrylic acid min. 99.0% [79-10-7] *BEH7g* MW 72.1 mp 13° bp 139° Tg 106° n_D^{20} 1.420 200 ppm MEHQ TSCA $H_2C=CHCO_2H$ Copolymerizes with many other monomers to introduce acid groups which are important in crosslinking, adhesion promotion, and stabilization of emulsion polymers. Homopolymers are water soluble.	00020-250	250 g
Acrylic anhydride min. 90% [2051-76-5] *BH7d* MW 126.1 bp 97°/35mm n_D^{20} 1.444 500 ppm MEHQ $(H_2C=CHCO)_2O$ Used to prepare specialty acrylate, acrylamide monomers. Forms cyclic anhydrides on polymerization and does not produce crosslinks in polymers.	00488-50	50 g
4-(2-Acryloxyethoxy)-2-hydroxybenzophenone [67845-93-6] *A2g* MW 312.3 mp 77–80° uninhibited TSCA For introduction of UV-absorbing sites into polymers.	19931-10	10 g
Acryloxyethyl thiocarbamoyl Rhodamine B MW 668.24 purple solid Fluorescent monomer useful for labeling polymers. **Ex. max**: 548nm **Em. max**: 570nm	25404-100	100 mg
2-Acryloxyethyltrimethylammonium chloride [44992-01-0] *H5g* MW 193.6 500 ppm MEHQ TSCA $H_2C=CHCO_2CH_2CH_2N(CH_3)_3Cl$ For preparation of water-soluble cationic polymers, introduction of cationic sites. 80% solution in water.	17981-250	250 g
N-Acryloxysuccinimide [38862-24-7] *U4d* MW 169.1 mp 69° C For preparation of acrylic derivatives, e.g., of biologically active compounds or dyes either in monomer or polymer form under mild conditions.	19930-1 19930-5	1 g 5 g

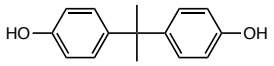
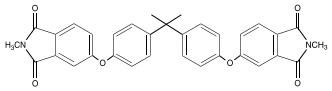
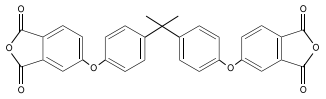
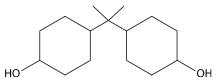
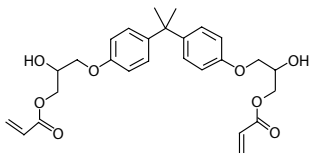
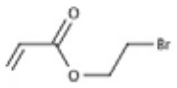
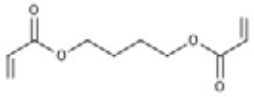
	Catalog #	Size
N-Acryloylmorpholine [5117-12-4] *U7ag* MW 141.2 bp 104°/4mm Tg 147° n_D^{20} 1.512 1000 ppm MEHQ For preparation of water-soluble (neutral substituted acrylamide) polymers.	21192-50	50 g
1-(Acryloyloxy)-3-(Methacryloyloxy)-2-Propanol [1709-71-3] MW 214.22 n_D^{20} 1.473 d 1.14 g/mL at 25° C 200 ppm MEHQ Colorless to pale yellow viscous liquid $C_{10}H_{14}O_5$ Will increase the hydrophilic properties of polymers when copolymerized into a range of acrylate and methacrylate systems. This monomer has been used in antibacterial, liquid crystalline and phosphorous containing resins. The methacrylate and acrylate functionality provide increased reactivity relative to the dimethacrylate crosslinker. *Duygu Avci and Lon J. Mathias, Polymer Bulletin, 2005, 54 (1-2), 11-19 Senhaji, O.; Monge, S.; Chougrani, K.; Robin, J. Macromolecular Chemistry and Physics, 2008, 209(16), 1694–1704. Dizman, B.; Elasri, M.O.; Mathias, L.J. Biomacromolecules, 2005, 6 (1), 514–520.*	25351-50 25351-100	50 ml 100 ml
Allyl glycidyl ether [106-92-3] *EHO5g* MW 114.1 bp 154° n_D^{20} 1.433 TSCA Reactive allyl ether. Can be used to introduce epoxide functionality into polymers made by free-radical polymerization.	19191-50	50 g
Allyl methacrylate [96-05-9] *CH5g* MW 126.2 bp 55°/30mm n_D^{20} 1.436 100 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH=CH_2$ Contains polymerizable units of differing reactivity, methacrylate moiety being more reactive than allyl. Requires Poison Pack	01643-500	500 g
Allyl Phenyl Ether, 98% [1746-13-0] *H4d* MW 134 bp 185 n_D^{20} 1.52 Specific gravity (20° C): 0.97 Amber Liquid TSCA High purity monomer which has a high refractive index allowing it to be used as a synthon in modifying polymer refractive index properties.	24894-100	100 g
2-Aminoethyl methacrylate hydrochloride, min. 95% [2420-94-2] *B6e* MW 166.6 mp 121 – 124° uninhibited TSCA $H_2C=C(CH_3)CO_2CH_2CH_2NH_2$ For preparation of polymers containing primary amine groups and preparation of specialty methacrylate monomers. Technical Data Sheet #522	21002-10	10 g
N-(2-aminoethyl) methacrylamide hydrochloride *U7d* mp 121 – 123° C (polymerization is initiated around 122° C) White to off-white free flowing powder $(C_6H_{12}N_2O)HCL$ Monomer building block for polymerization reactions which may yield a primary amine functional polymer.	24833-5	5 g

	Catalog #	Size
N-(t-BOC-aminopropyl)methacrylamide [2197-397-94] *U2bd* MW 242 mp 81–83° C uninhibited solid white powder $C_{12}H_{22}O_3N_2$ A solvent soluble, blocked primary amine monomer, it is soluble in a range of organic solvents and it polymerizes readily with other vinylic monomers. The t-BOC group is widely known to those in the peptide field and is easily deprotected to the free amine with a variety of reagents including HCl/MeOH, Me^3SiI, or heat (185° C). Copolymers containing N-(N-BOC-aminopropyl)methacrylamide can be readily converted to primary amino copolymers which can be further modified by coupling to peptides, dyes, etc.	24318-10	10 g
N-(3-Aminopropyl)methacrylamide hydrochloride, >98% [72607-53-5] *U2bd* MW 178.7 mp 122–124° uninhibited TSCA $(C_7H_{14}N_2O)HCL$ Primary amine monomer. Hydrolytically stable for preparation of polymers containing primary amine functionality. Technical Data Sheet #522 *For use of N-(3-Aminopropyl)methacrylamide hydrochloride to make reductively biodegradable hydrogels for tissue engineering, see: Vetrik, M. et al, Polymer Degradation and Stability 96 (2011) 892-897*	21200-5	5 g
9-Anthracenylmethyl methacrylate [31645-35-9] *U3ag* PolyFluor® 407 MW 276.2 mp 82 – 84° Yellow crystals Fluorescent monomer.	23587-100 23587-1	100 mg 1 g

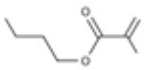
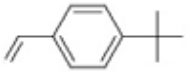
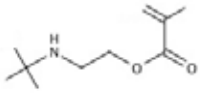
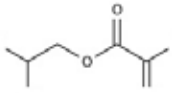
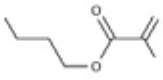
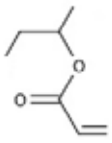
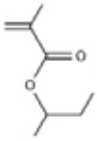
B

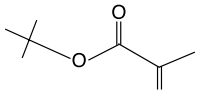
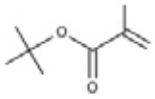
Barium methacrylate, >95% [17989-77-4] *HJX7d* MW 307.5 TSCA $[H_2C=C(CH_3)CO_2]_2Ba$ Polymerizable metal salt.	01994-50	50 g
Benzhydryl methacrylate [25574-72-5] *U5d* MW 252.3 mp 80–82° C n_D^{20} (polymer) ~1.56 $(C_6H_5)_2CHOCO\ C(CH_3)=CH_2$ Monomer with high refractive index. Useful in ophthalmic applications. Technical Data Sheet #509	24286-10	10 g
2(5-Benzotriazolyl 3-t-butyl 4-methacryloxy)phenyl propionic acid, isooctyl ester *U6d* MW 519.66 UV absorbing monomer. Viscous liquid.	24241-1	1 g

	Catalog #	Size
Benzyl acrylate, ~99% [2495-35-4] *H4g* MW 162.2 bp 100°/118mm Tg 6° n^{20}_D 1.514 150 ppm MEHQ TSCA $C_6H_5CH_2OCO\ CH{=}CH_2$ Used to make polymers of high (~1.55) refractive index.	01997-100	100 g
Benzyl methacrylate, min. 95% [2495-376] *H2d* MW 176.2 bp 231–233° Tg 54° n^{20}_D 1.512 50 ppm MEHQ TSCA $H_2C{=}C(CH_3)CO_2CH_2C_6H_5$ Used to make polymers of high (1.5680) refractive index.	02000-100	100 g
N-Benzylmethacrylamide [3219-55-4] *U2g* MW 175.2 mp 82° $C_6H_5CH_2NHCO\ C(CH_3){=}CH_2$ Used to make polymers of high (1.5965) refractive index.	17969-25	25 g
2,2-Bis[4-(2-acryloxyethoxy)phenyl]propane [64401-02-1] *HO5d* MW 424.5 750 ppm MEHQ TSCA Rigid, hydrophobic, crosslinking monomer.	04136-25	25 g
Bis(2-methacryloxyethyl) N,N'-1,9-nonylene biscarbamate [72869-86-4] *U5d* (Diurethane dimethacrylate) MW 470.6 bp 200° n^{20}_D 1.485 $RCH_2[C(CH_3)(CH_3)CH_2]_2CH_2R$ Long chain-length crosslinking monomer.	21619-50	50 g
Bis(2-methacryloxyethyl) phosphate [32435-46-4] *U4d* MW 322.2 n^{20}_D 1.469 TSCA $[H_2C{=}C(CH_3)CO_2CH_2CH_2O]_2P(O)OH$ Crosslinking monomer. Adhesion promoter through free phosphoric acid group.	16041-10	10 g
2,2-Bis(4-methacryloxyphenyl)propane [3253-39-2] *H2g* MW 364.4 mp 72–74° TSCA $[H_2C{=}C(CH_3)CO_2C_6H_4]_2C(CH_3)_2$ Rigid, hydrophobic, crosslinking monomer.	01381-25	25 g

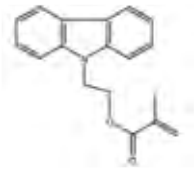
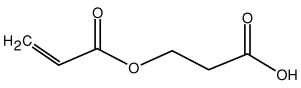
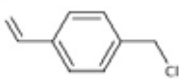
	Catalog #	Size
Bisphenol A [80-05-7] *HO7g* MW 228.3 mp 158–159° bp 220°/4mm TSCA $(CH_3)_2C(C_6H_4OH)_2$ Useful building block to form diacrylates or diglycidylethers for polymerization into engineering plastics, biomedical materials or used as host matrices for conductive materials. (i.e. carbon nanotubes). Used in epoxy resins and polyethers. 	02548-100	100 g
4,4'-Bisphenol A Bis-(N-Methylphthalimide) [54395-52-7] *H4g* MW 546.4 Tg ~67° C Useful in the production of heat resistant polyimides, thermoplastic polyetherimides and special plasticizers. 4,4' isomer ~ 95% solid. 	24284-25	25 g
4,4'-Bisphenol A Dianhydride [38103-06-9] *H4g* MW 520.5 4,4' isomer ~95% solid. Used in the synthesis of high performance polyetherimides and for flame retardant, electrically insulating coatings, non-linear optical applications, for epoxy curing, heat curable, and thermosetting copolymers with silicones. 	24283-25	25 g
Bisphenol A hydrogenated [80-04-6] *HV5g* MW 240.4 mp 154° TSCA Diol, could be used in preparation of all aliphatic epoxy resins, polyethers. 	03474-100	100 g
Bisphenol A-bis(2-hydroxypropyl) acrylate [4687-94-9] MW 484.21 d 1.18 g/cm3 at 25° C ~600 ppm MEHQ Colorless to pale yellow liquid $C_{27}H_{32}O_8$ Hydroxy containing crosslinking monomer. UV curable. Has been used as a component of curable inks, coatings, product varnishes and lacquers. 	25431-50	50 ml
2-Bromoethyl acrylate, min. 95% [4823-47-6] *H5d* MW 179 bp 52–53°/5mm n_D^{20} 1.476 100 ppm MEHQ $BrCH_2CH_2OCOCH=CH_2$ Reactive halogen, has potential use in curable and reactive polymers and in synthesis of other monomers. 	02015-10	10 g
1,4-Butanediol diacrylate, min. 85% [1070-70-8] *BH5d* MW 198.2 bp 83°/0.3mm Tg 45° n_D^{20} 1.456 75 ppm MEHQ TSCA $(H_2C=CHCO_2CH_2CH_2-)_2$ Crosslinking monomer. 	02049-100	100 g

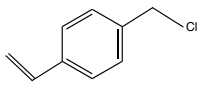
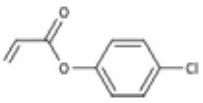
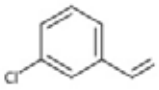
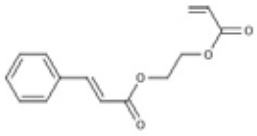
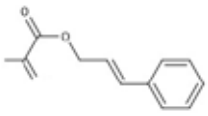
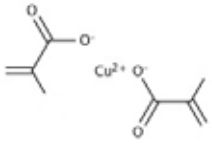
	Catalog #	Size
1,4-Butanediol diglycidyl ether [2425-79-8] *BO6g* MW 202.3 bp 260–266° n_D^{20} 1.453 TSCA For post-crosslinking reactions, preparation of aliphatic epoxy resins. WPE ~130 (83°/0.3mm).	01795-50	50 g
1,3-Butanediol dimethacrylate, 98% [1189-08-8] *EHOV7d* MW 226.3 bp 73°/0.1mm n_D^{20} 1.452 200 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2CH(CH_3)O_2CC(CH_3)=CH_2$ Crosslinking monomer.	02047-500	500 g
1,4-Butanediol dimethacrylate, min. 90% [2082-81-7] *HO2d* MW 226.3 bp 132°/4mm n_D^{20} 1.456 200 ppm MEHQ TSCA $[H_2C=C(CH_3)CO_2CH_2CH_2-]_2$ Crosslinking monomer.	05973-250	250 g
3-Butene-1,2,3-tricarboxylic acid [26326-05-6] *U2g* MW 188.1 mp 184–185° Crosslinking monomer. For preparation of alkenyl ester crosslinking monomers.	01396-25 01396-5	25 g 5 g
2-n-Butoxyethyl methacrylate, ~99% [13532-94-0] *H6d* MW 186.2 bp 90–92°/3mm n_D^{20} 1.434 400–500 ppm MEHQ $H_2C=C(CH_3)CO_2CH_2CH_2O(CH_2)_3CH_3$ For low Tg polymers having higher polarity than alkyl methacrylate polymers.	02034-100	100 g
4-tert-Butoxystyrene, min. 99% [95418-58-9] *H3g* MW 176.2 bp 72–73°/.3mm n_D^{20} 1.5240 200 ppm TBC TSCA $H_2C=CHC_6H_4OC(CH_3)_3$ Hydroxy containing monomer.	21760-10	10 g
n-Butyl acrylate, min. 99% [141-32-2] *BEHJO6d* MW 128.2 bp 43–44°/14mm Tg -54° n_D^{20} 1.418 15–20 ppm MEHQ TSCA $H_2C=CHCO_2(CH_2)_3CH_3$ Forms hydrophobic, low Tg polymers soluble in hydrocarbons.	02037-500 02037-3	500 g 3 kg

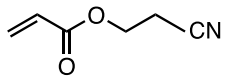
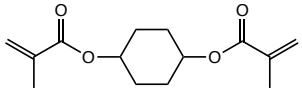
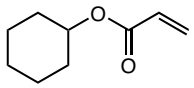
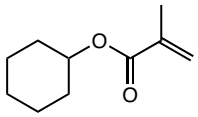
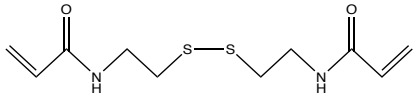
	Catalog #	Size
n-Butyl methacrylate [97-88-1] *EHOV7d* MW 142.2 bp 162° n^{20}_D 1.423 100 ppm MEHQ Tg 20° TSCA $H_3C(CH_2)_3OCOC(CH_3)=CH_2$ Forms hydrophobic polymers soluble in hydrocarbons. 	02059-250 02059-500	250 g 500 g
4-(tert-Butyl)styrene, 95% [1746-23-2] *EH6d* MW 160.3 bp 219° Tg 132° n^{20}_D 1.526 100 ppm t-butylcatechol TSCA $(CH_3)_3CC_6H_4CH=CH_2$ Higher Tg homolog of styrene, increased solubility in aliphatic hydrocarbons. 	02606-25	25 g
2-(tert-Butylamino)ethyl methacrylate, min. 90% [3775-90-4] *EHO7g* MW 185.3 bp 100–105°/12 mm Tg 33° n^{20}_D 1.442 1100 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2NHC(CH_3)_3$ Secondary amine monomer. 	01797-100	100 g
iso-Butyl methacrylate [97-86-9] *CH4d* MW 142.2 bp 154° Tg 53° n^{20}_D 1.420 10–20 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH(CH_3)_2$ Forms hydrophobic polymers soluble in hydrocarbons. 	02056-500	500 g
n-Butyl methacrylate [97-88-1] *EHOV7d* MW 142.2 bp 162° Tg 20° n^{20}_D 1.423 100 ppm MEHQ TSCA $H_3C(CH_2)_3OCOC(CH_3)=CH_2$ Forms hydrophobic polymers soluble in hydrocarbons. 	02059-3	3 kg
sec-Butyl acrylate [2998-08-5] *EHOV7d* MW 128.2 bp 59–60°/50mm Tg 12° C n^{20}_D 1.414 100 ppm MEHQ TSCA Hydrophobic acrylate ester having Tg similar to the less hydrophobic ethyl acrylate. 	02038-25	25 g
sec-Butyl methacrylate [2998-18-7] *CU4d* MW 142.2 bp 146° Tg 60° 100 ppm MEHQ $H_3CCH_2CH(CH_3)OCOC(CH_3)=CH_2$ Forms hydrophobic polymers soluble in hydrocarbons. 	02057-10	10 g

	Catalog #	Size
tert-Butyl acrylate [1663-39-4] *CH6d* MW 128.2 bp 30–31°/26mm Tg 43° n_D^{20} 1.411 10–20 ppm MEHQ TSCA $H_2C=CHCO_2C(CH_3)_3$ Forms hydrophobic polymers. Polymers are easily transesterified and thermally eliminate isobutene to form acid groups. 	02039-250	250 g
tert-Butyl methacrylate [585-07-9] *CU6g* MW 142.2 bp 65–66°/57mm Tg 107° n_D^{20} 1.415 200 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2C(CH_3)_3$ Polymer easily transesterified, thermally eliminates isobutene to form acid groups. 	02058-100	100 g
n-Butyltrimethoxysilane [1067-57-8] *EH5g* MW 178.3 bp bp 164–165° n_D^{20} 1.398 TSCA $H_3C(CH_2)_3Si(OCH_3)_3$ Hydrophobic siloxane monomer. Produces crosslinks in polysiloxanes	21094-250	250 g

C

2-(9H-Carbazole-9-yl) ethyl methacrylate [15657-91-7] *HO5d* MW 297.33 mp 82–84° C n_D^{20} 1.69 Analog of photoconductive polymer, N-Vinylcarbazole. UV λ max: 241nm 	24372-1	1 g
β-Carboxyethyl Acrylate, >98% Active [24615-84-7] *BHM4d* MW 144 1,000 ppm MEHQ Slightly Viscous Liquid $CH_2=CHCO_2(CH_2)_2CO_2H$ A high purity material is in the class of carboxylic monomers of the acrylic or methacrylic acid type. A significant difference is the greater separation of the carboxylic acid functionality from the polymerizable vinyl functionality. Can be polymerized in solution or emulsion to produce acrylic, vinyl-acrylic or styrenic-acrylic polymers with improved adhesive properties.  Other key differences compared to conventional carboxylic acid functional materials are: • Promotes flexibility in polymers owing to lower glass transition of its homopolymers (< 30° C) • Provides improved adhesion and stability in emulsion polymers, due to its -COOH groups being more available than those in the conventional carboxylic acids • Much more reactive in its salt form than acrylic acid, allowing high levels of incorporation, over a wide pH range • More compatible with other monomers, thus reducing aqueous phase polymerization and producing more uniform copolymers	24891-100	100 g
4-Chloromethylstyrene [1592-20-7] *BHO6g* (4-vinylbenzyl chloride) MW 152.6 bp ~229° 500 ppm t-butylcatechol, ppm nitroparaffin TSCA $H_2C=CHC_6H_4CH_2Cl$ Reactive styrene monomer. Can be used to prepare Merrifield resins without using a chloromethylation step. 	22193-25	25 g

	Catalog #	Size
Chloromethylstyrene, 43% para, 57% meta, ~96% [30030-25-2] *BH6d* (vinylbenzyl chloride) MW 152.6 bp 229° n_D^{20} 1.570 50–100 ppm t-butylcatechol 700-900 ppm nitroparaffin TSCA $H_2C=CHC_6H_4CH_2Cl$ Reactive styrene monomer. Can be used to prepare Merrifield resins without using a chloromethylation step. 	02718-100 02718-500	100 g 500 g
4-Chlorophenyl acrylate [13633-87-9] *U4d* MW 182.6 bp 70°/1mm Tg 58° n_D^{20} 1.536 100 ppm HQ $4\text{-}ClC_6H_4OCOCH=CH_2$ Higher refractive index (n = ~1.55) than most acrylate esters. 	01331-10	10 g
3-Chlorostyrene, 98% [2039-85-2] *EH4d* MW 138.6 mp 62°/6mm Tg 90° n_D^{n2} 1.562 0.1% BHT $H_2C=CHC_6H_4Cl$ Can be used in synthesis of other styrene monomers, high refractive index (~1.6) polymers. 	02042-5	5 g
2-Cinnamoyloxyethyl acrylate [52049-17-9] *HO4d* MW 202.3 n_D^{20} 1.562 200 ppm MEHQ $C_6H_5CH=CHCO_2CH_2CH_2OCOCH=CH_2$ Photocrosslinking monomer. 	24014-10	10 g
Cinnamyl methacrylate [31736-34-2] *U5d* MW 202.3 bp 141°/3mm n_D^{20} 1.446 100 ppm MEHQ $C_6H_5CH=CHCH_2OCOC(CH_3)=CH_2$ Photocrosslinking monomer. 	02092-5	5 g
Copper (II) methacrylate [53721-10-1] *X7d* MW 233.7 $[H_2C=C(CH_3)CO_2]_2Cu$ Metal salt of methacrylic acid. 	21222-25	25 g

	Catalog #	Size
2-Cyanoethyl acrylate [106-71-8] *BOVW6bd* MW 125.1 bp 90°/5mm Tg 4° n_D^{20} 1.447 400–800 ppm MEHQ TSCA Polar acrylate ester used in a wide range of applications including photocurable resists for liquid crystal devices, photocurable polymer insulators for multilayer circuitry, electroluminescent products, graft polymers for controlled diffusion, vulcanization of rubbers and as an adhesion promoter. 	01829-100	100 g
trans-1,4-Cyclohexanediol dimethacrylate [38479-34-4] *EHOV7d* MW 252.3 Light yellow liquid Crosslinking monomer. 	18912-10	10 g
Cyclohexyl acrylate, min 85% [3066-71-5] *U7d* MW 154.1 bp 182–184° Tg 19° n_D^{20} 1.467 200 ppm MEHQ TSCA Bulky alkyl acrylate ester. 	02109-100	100 g
Cyclohexyl methacrylate, ~98% [101-43-9] *EH4d* MW 168.2 bp 71–74°/5mm Tg 83° n_D^{20} 1.459 50 ppm MEHQ, 2 ppm phenothiazine TSCA $H_2C=C(CH_3)CO_2C_6H_{11}$ Bulky alkyl methacrylate ester. 	01837-100	100 g
N,N'-Cystaminebisacrylamide, Electro Pure™ [60984-57-8] *U6f* MW 260.4 mp 120–125° Reversible crosslinking monomer. Can be used to introduce mercaptan groups into polymers by reducing to mercaptan after polymerization. Requires Dry Ice 	09809-5	5 g

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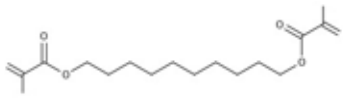
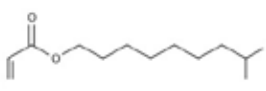
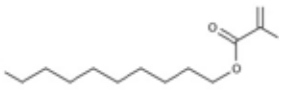
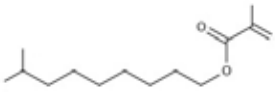
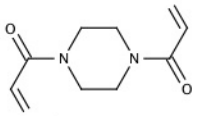
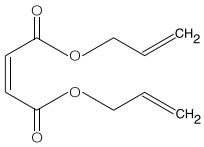
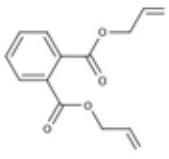
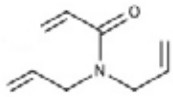
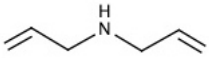
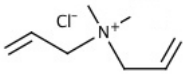
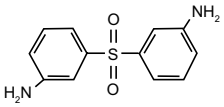
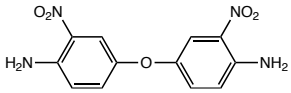
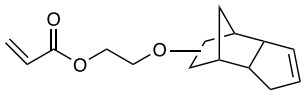
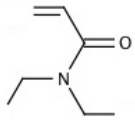
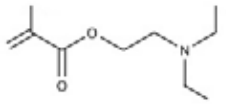
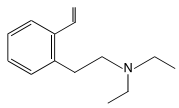
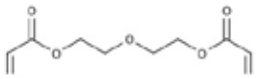
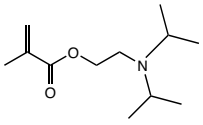
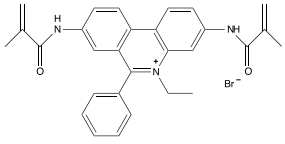
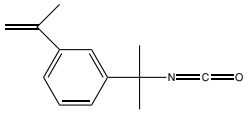
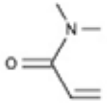
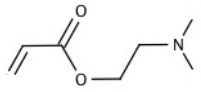
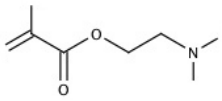
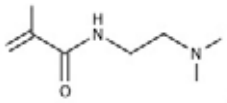
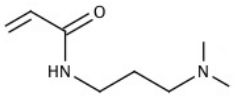
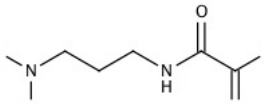
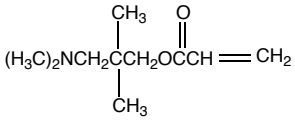
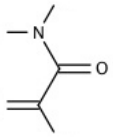
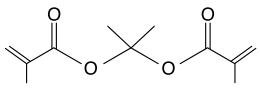
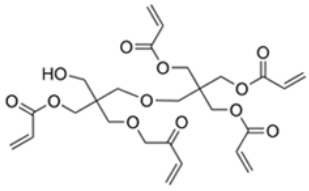
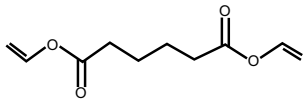
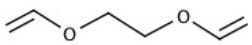
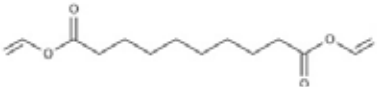
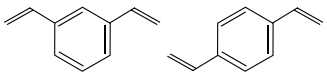
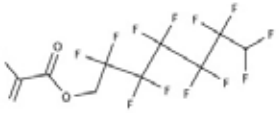
1,10-Decanediol dimethacrylate [6701-13-9] *EHOU6d* MW 310.4 bp 170°/2mm n_D^{20} 1.458 270 ppm HQ TSCA $[H_2C=C(CH_3)CO_2(CH_2)_5]_2$ Hydrophobic, long-chain crosslinking monomer. 	02140-25	25 g
iso-Decyl acrylate [1330-61-6] *H4d* MW 212.3 bp 121°/10mm Tg -55° n_D^{20} 1.440 50 ppm MEHQ TSCA $H_2C=CHCO_2C_{10}H_{21}$ Hydrophobic ester monomer. Forms hydrocarbon-soluble polymers. 	03008-100	100 g

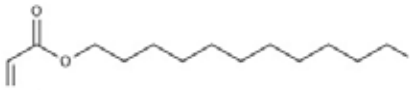
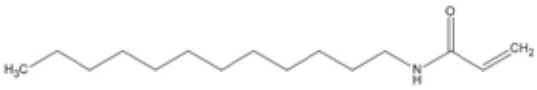
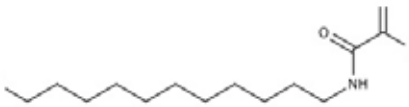
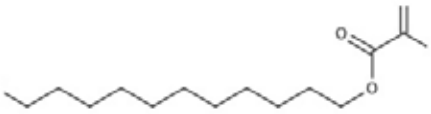
	Catalog #	Size
n-Decyl methacrylate, 99% [3179-47-3] *U5d* MW 226.4 bp 155–156°/22mm Tg -30° n_D^{20} 1.443 100 ppm MEHQ TSCA $H_3C(CH_2)_9OCOC(CH_3)=CH_2$ High-purity hydrophobic ester monomer, forms oil-soluble polymers. 	23344-25	25 g
iso-Decyl methacrylate, min. 90% [29964-84-9] *H5g* MW 226.3 bp 78°/1mm n_D^{20} 1.441 100ppm HQ inhibitor TSCA $H_2C=C(CH_3)CO_2C_{10}H_{21}$ Hydrophobic ester monomer, forms oil-soluble polymers. 	22493-100	100 g
1,4-Diacryloylpiperazine [6342-17-2] *H5d* MW 194.2 mp 90–92° Acrylamide-based crosslinking monomer. 	21190-10	10 g
Diallyl Maleate [999-21-3] *HV4d* MW 196.2 mp -47° C (lit.) bp 160–116° C/4mm Hg (lit.) n_D^{20} 1.469 d 1.073g/ml (lit.) 230° C TSCA $CH_2=CHCH_2OCOCH=CHCOOCH_2CH=CH_2$ Reactive functional monomer. Polymers formed with the incorporation of Diallyl Maleate have pendant allyl groups. Applications for Diallyl Maleate include polyester resins, adhesives, and ion exchange resins. When used at low levels, Diallyl Maleate is an effective agent for the promotion of branching in emulsion polymers. 	02156-250	250 g
Diallyl Maleate–99% Active [999-21-3] *H4d* MW 196 Clear Liquid $CH_2=CHCH_2OCOCH=CHCOOCH_2CH=CH_2$ Moisture (%): 0.05 Diallyl ester of maleic acid. Once polymerized through the vinyl center adjacent to the ester groups, it provides multiple postfunctionalization target sites at the pendant allylic centers. This makes it particularly useful both in acrylic chemistry but also in combination with alkyd and polyester resins. When employed at very low levels it is an effective site for branching generation in emulsion polymers.	24892-100	100 g
Diallyl phthalate, practical [131-71-9] *I7g* MW 246.3 bp 161–163°/5mm n_D^{20} 1.5190 C_6H_4-1,2-$(CO_2CH_2CH=CH_2)_2$ Crosslinking monomer producing considerable cyclic structures. 	02159-1	1 kg

	Catalog #	Size
N,N-Diallylacrylamide [3085-68-5] *U7d* MW 151.2 bp 108–110°/3mm n_D^{20} 1.489 100 ppm HQ $(H_2C=CHCH_2)_2NCOCH=CH_2$ Crosslinking monomer. 	01848-10	10 g
Diallylamine, min. 98% [124-02-7] *IWX7g* MW 97.2 bp 110° n_D^{20} 1.440 TSCA $(H_2C=CHCH_2)_2NH$ Forms soluble cyclopolymers. 	21424-100	100 g
Diallyldimethylammonium chloride, 65% soln. in water [7398-69-8] *H4g* MW 161.7 TSCA $(H_2C=CHCH_2)_2N(CH_3)_2Cl$ For preparation of linear all-aliphatic cationic polymers by cyclopolymerization mechanism. 	15912-100	100 g
3,3′-Diaminodiphenyl sulfone, min 98% [599-61-1] *EJU4g* MW 248 mp 171–172° TSCA $(H_2NC_6H_4)_2SO_2$ Preparation of polyamides, polyimides. 98% (contains 3,4′-isomer) 	21393-50	50 g
4,4′-Diamino-3,3′-dinitrodiphenyl ether [3273-78-7] *U5d* MW 290.2 mp 296° $C_{12}H_{10}N_4O_5$ Preparation of polyamides, polyimides. 	16685-10	10 g
Dibutyltin dilaurate [77-58-7] *BH6g* MW 631.6 mp 24° bp 205° n_D^{20} 1.470 d 1.066 Yellowish liquid TSCA $[CH_3(CH_2)_{10}CO_2]_2Sn[(CH_2)_3CH_3]_2$ Catalyst for polymerizing lactide and glycolide and isocyanate reactions.	01862-50	50 g
Dicyclopentenyloxyethyl acrylate [65983-31-5] *HOV7d* MW 248.3 bp 113°/1mm Tg 11° n_D^{20} 1.501 700 ppm MEHQ TSCA Double bond in dicyclopentenyl does not participate in polymerization but can be post-reacted, e.g., by oxidative crosslinking. 	15797-25	25 g
N,N-Diethylacrylamide, min. 95% [2675-94-7] *U4d* MW 127.2 bp 93°/19mm n_D^{20} 1.464 100 MEHQ $(C_2H_5)_2NCOCH=CH_2$ Substituted acrylamide monomer. 	00871-25	25 g

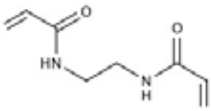
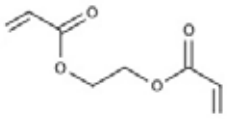
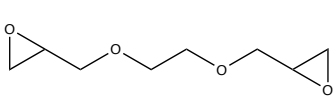
	Catalog #	Size
2-(N,N-Diethylamino)ethyl methacrylate [105-16-8] *EHO5g* MW 185.3 bp 90–92°/3mm Tg 20° n^{20}_D 1.444 100 ppm PTZ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2N(C_2H_5)_2$ Preparation of cationic polymers, especially quaternary ammonium polymers. 	01872-500	500 g
2-(Diethylamino)ethylstyrene, mixed m,p-isomers, min. 95% [74952-73-1] *U5d* MW 203.3 bp 75–85°/1mm Hg n^{20}_D 1.443 100 ppm MEHQ Amine-functional styrene monomer. 	24100-5	5 g
Diethylene glycol diacrylate [4074-88-8] *BOW6d* MW 214.2 bp 200°/760mm n^{20}_D 1.463 120 ppm MEHQ TSCA $(H_2C=CHCO_2CH_2CH_2)_2O$ Hydrophilic crosslinking monomer. 	02215-100	100 g
Diethylene glycol dimethacrylate [2358-84-1] *H4g* MW 242.3 bp 200°/760mm n^{20}_D 1.458 500 ppm MEHQ TSCA $[H_2C=C(CH_3)CO_2(H_2CH_2]_2O$ Hydrophilic crosslinking monomer. 	02214-100	100 g
2-Diisopropylaminoethyl methacrylate [16715-83-6] *U5d* MW 213.3 bp 70–75°/1mm n^{20}_D 1.449 Amine containing monomer. For preparation of polymers containing tertiary amine functionality. 	24263-10	10 g
3,8-Dimethacryloyl ethidium bromide *U4ag* (5-ethyl-3,8-dimethacrylamido-6-phenylphenanthridinium bromide; PolyFluor® 512) MW 530.2 mp 245.5–247° Orange crystals Fluorescent monomer. 	23590-100 23590-1	100 mg 1 g
3-Isopropenyl-α,α-dimethylbenzyl Isocyanate [2094-99-7] *HO5g* MW 201.3 bp 268–271° n^{20}_D 1.530 0.01% BHT TSCA $H_2C=C(CH_3)C_6H_4C(CH_3)_2NCO$ Aliphatic isocyanate monomer. 	19706-100	100 g
N,N-Dimethylacrylamide, min. 98% [2680-03-7] *ESVW5d* MW 99.1 bp 82–84°/21mm Tg 89° n^{20}_D 1.473 500 ppm MEHQ TSCA $H_2C=CHCON(CH_3)_2$ Water-soluble, hydrolytically stable acrylamide derivative used in chromatographic resins. Requires Poison Pack 	02255-100	100 g

	Catalog #	Size
2-(N,N-Dimethylamino)ethyl acrylate [2439-35-2] *EHOV7d* MW 143.1 bp 53°/3mm n^{20}_D 1.438 1000 ppm MEHQ TSCA $H_2C=CHCO_2CH_2CH_2N(CH_3)_2$ For preparation of cationic polymers, especially quaternary ammonium polymers. 	02257-500	500 g
2-(N,N-Dimethylamino)ethyl methacrylate, min. 99% [2867-47-2] *HO6d* MW 157.2 bp 75–77°/13mm Tg 19° n^{20}_D 1.440 d 0.933 g/mL at 25° C 1000 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2N(CH_3)_2$ For preparation of cationic polymers, especially quaternary ammonium polymers. Requires Poison Pack Technical Data Sheet #213 	00213-500	500 g
N-[2-(N,N-Dimethylamino)ethyl]methacrylamide [13081-44-2] *U6d* MW 156.3 bp 87°/1.8mm n^{20}_D 1.474 100 ppm HQ $(H_3C)_2NCH_2CH_2NHCOC(CH_3)=CH_2$ Amine-functional methacrylamide derivative. 	06172-5	5 g
N-[3-(N,N-Dimethylamino)propyl]acrylamide, min.95% [3845-76-9] *U6d* MW 156.2 bp 85°/.01mm Tg 19° n^{20}_D 1.482 Hg uninhibited $(H_3C)_2N(CH_2)_3NHCOCH=CH_2$ For preparation of cationic polymers, especially quaternary ammonium polymers. 	22018-10	10 g
N-[3-(N,N-Dimethylamino)propyl]methacrylamide [5205-93-6] *BH4g* MW 170.3 bp 141°/2mm n^{20}_D 1.479 600–750 ppm MEHQ TSCA $H_2C=C(CH_3)CONH(CH_2)_3N(CH_3)_2$ For preparation of cationic polymers, especially quaternary ammonium polymers. Monomer is more hydrolytically stable than corresponding esters. 	09656-100	100 g
3-Dimethylaminoneopentyl acrylate *EHVWX6d* MW 185.3 bp 53°/1.4mm n^{20}_D 1.439 100 MEHQ Amine containing monomer. For preparation of polymers containing tertiary amine functionality. 	17970-10	10 g
N,N-Dimethylmethacrylamide [6976-91-6] *U4d* MW 113.2 bp 65–67°/10mm n^{20}_D 1.460 100 ppm MEHQ $(H_3C)_2NHCOC(CH_3)=CH_2$ Substituted amide monomer. 	02270-25	25 g
2,2-Dimethylpropanediol dimethacrylate [1985-51-9] *EHOV7d* MW 240.3 bp 112°/1.2mm n^{20}_D 1.453 60 ppm MEHQ TSCA $[H_2C=C(CH_3)CO_2CH_2]_2C(CH_3)_2$ Crosslinking monomer. 	02276-100	100 g

	Catalog #	Size
Dipentaerythritol pentaacrylate (mixture of tetra-, penta-, hexaacrylate) [60506-81-2] *HO5g* . . MW 524.5 Tg 90° n_D^{20} 1.490 270 ppm MEHQ TSCA $O[CH_2C(CH_2OR)_{23}]_2$ R=COCH=CH_2 Highly efficient crosslinking monomer, used especially in UV curing coatings. 	16311-500	500 g
Divinyl Adipate [4074-90-2] . . . . . MW 198.22 mp 28° C (freezing point) MEHQ $C_{10}H_{14}O$ Divinyl adipate is a reactive double vinyl ester that can be used as a crosslinker to crosslink hydroxyl containing polymers. It has been used to synthesize biodegradable hydrogels and other crosslinked biodegradable polymers.  *1. "Enzyme-Catalyzed Polycondensation of Polyester Macrodiols with Divinyl Adipate: A Green Method for the Preparation of Thermoplastic Block Copolyesters" Dai, S.; et al. Biomacromolecules, 2009, 10 (12), pp 3176–3181 2. "Facile Preparation of Biodegradable Glycol Chitosan Hydrogels Using Divinyladipate as a Crosslinker" Kim, B.S.; et al. Macromolecular Research, Vol. 17, No. 10, pp 734-738 (2009)*	25338-100	100 g
Divinyl glycol [1069-23-4] *H4g* . . . . . (1,5-hexadiene-3,4-diol) MW 114.1 bp 89–90°/8mm n_D^{20} 1.479 0.25% BHT H_2C=CHCH(OH)CH(OH)CH=CH_2 Crosslinking monomer. 	18252-25	25 g
Divinyl sebacate [10355-50-7] *A2d* . . . . . MW 254.3 bp 142–144°/3mm n_D^{20} 1.454 120 ppm HQ $[H_2C=CHO_2C(CH_2)_4]_2$ Crosslinking vinyl ester monomer. 	04632-5	5 g
Divinylbenzene [1321-74-0] *H5d* MW 130.2 bp 198° n_D^{20} 1.574 ~1000 ppm t-butylcatechol inhibitor TSCA $C_6H_4(CH=CH_2)_2$ Crosslinking monomer used primarily with styrene. 		
80% Active	22478-100	100 g
50–60% Active meta/para ratio 2.3:1	01892-100	100 g
1H,1H,7H-Dodecafluoroheptyl methacrylate [2261-99-6] *EHOV7d* . . . . . MW 400.2 bp 107°/23mm Tg 13° n_D^{20} 1.349 120 ppm HQ $H_2C=C(CH_3)CO_2CH_2(CF_2)_6H$ Low refractive index polymers (~1.36). 	00767-25	25 g

	Catalog #	Size
n-Dodecyl acrylate [2156-97-0] *U5g* MW 240.4 bp 119°/0.8mm Tg -3° n_D^{20} 1.445 200 ppm MEHQ TSCA $H_2C=CHCO_2(CH_2)_{11}CH_3$ Forms hydrophobic polymers soluble in hydrocarbons. 	02460-50	50 g
New! N-Dodecylacrylamide [1506-53-2] *U4g* MW 239.4 mp 58° C bp 155° C Solid Long-chain amide monomer. 	25723-5 25723-25	5 g 25 g
N-Dodecylmethacrylamide [1191-39-5] *U5g* MW 253.4 mp 41° bp 145°/0.08mm Tg 15° Hydrophobic, long-chain alkyl-substituted amide monomer. 	04135-10	10 g
n-Dodecyl methacrylate [142-90-5] *H2g* MW 254.4 bp 142–143°/2mm Tg -55° n_D^{20} 1.445 400 ppm MEHQ, 5 ppm HQ TSCA $H_2C=C(CH_3)CO_2(CH_2)_{11}CH_3$ Preparation of hydrophobic polymers. 	02461-250	250 g

E

N, N' Ethylene Bisacrylamide [2656-58-3] *HU2d* MW 168.2 mp 141–143° C $C_8H_{12}N_2O_2$ Crosslinking monomer used in the preparation of polyacrylamide resins. 	09811-1	1 g
Ethylene glycol diacrylate [2274-11-5] *EHOV7d* MW 170.2 bp 62°/0.9mm n_D^{20} 1.453 100 ppm MEHQ TSCA $(H_2C=CH(O_2CH_2-)_2$ Crosslinking monomer. 	02302-25	25 g
Ethylene glycol diglycidyl ether (Quetol 651) [2224-15-9] *H5g* MW 174.2 bp 112°/4.5mm n_D^{20} 1.463 TSCA Crosslinker for carboxyl-, amine- and hydroxyl- functional polymers. Material is ~100% active and contains higher molecular weight compounds having chloropropylene segments produced by reaction with more than one epichlorohydrin molecule per hydroxyl in synthesis. *Histochemical Journal, 20, 222 (1988)* 	01479-100	100 g

	Catalog #	Size
Ethylene glycol dimethacrylate, min 88% [97-90-5] *U6d* bp 83–85°/1mm n_D^{20} 1.454 70 ppm HQ $[H_2C=C(CH_3)CO_2CH_2-]_2$ Useful as a high purity crosslinker with bridging capability between polymer chains.	02303-250	250 g
Ethylene glycol dimethacrylate, min 98% [97-90-5] *HJ6g* bp 83–85°/1mm n_D^{20} 1.454 100 ppm MEHQ $[H_2C=C(CH_3)CO_2CH_2-]_2$ Useful as a high purity crosslinker with bridging capability between polymer chains.	24030-250	250 g
Ethylene glycol dimethacrylate, 99.7% [97-90-5] *HO2d* MW 198 50 ppm MEHQ Clear Liquid $[H_2C=C(CH_3)CO_2CH_2-]_2$ High purity monomer for contact lens applications. Useful as a high purity crosslinker with bridging capability between polymer chains.	24896-250	250 g
2-Ethylhexyl acrylate [103-11-7] *EH5d* MW 184.3 bp 128–129°/50mm Tg -50° n_D^{20} 1.436 50 ppm MEHQ TSCA $H_2C=CHCO_2CH_2CH(C_2H_5)(CH_2)_3CH_3$ Hydrophobic, low Tg, monomer used as internal plasticizer for polymers of other, high Tg, monomers.	00587-250	250 g
N-Ethylmethacrylamide [7370-88-9] *EI7d* MW 113.2 bp 106°/4mm $H_3CCH_2NHCOC(CH_3)=CH_2$ Solvent-soluble, polymerizable amide.	02322-10	10 g
2-(2-Ethoxyethoxy)ethyl acrylate [7328-17-8] *HO4d* MW 188.2 bp 250° Tg -70° n_D^{20} 1.440 1000 ppm MEHQ plus 5 ppm HQ TSCA $H_2C=CHCO_2(CH_2CH_2O)_2C_2H_5$ Polar, hydrophilic, monomer, low volatility, low Tg. Higher polarity than n-octyl acrylate.	02626-100	100 g

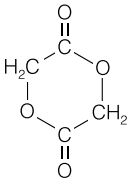
F

Fluorescein dimethacrylate *U5ad* (3',6'-dimethacryloxyspirobenzo[c]-furan[1,9']xanthen-3-one; PolyFluor® 511) MW 468.4 mp 154.5–156° Off-white crystals Fluorescent monomer.	23589-100 23589-1	100 mg 1 g

G

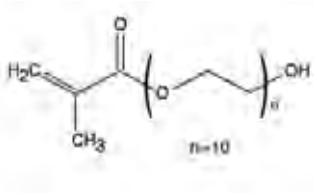
	Catalog #	Size
Glycerol monomethacrylate, mixture of isomers [5919-74-4] *HO5f* MW 160.2 bp 140°/0.6mm n^{20}_D 1.470 4000 ppm MEHQ TSCA Hydrophilic monomer useful in hydrogel preparation.	04180-12 04180-25	12 g 25 g
1,3-Glyceryl dimethacrylate [1830-78-0; 28497-59-8] (Bis(methacryloxy)propanol) MW 228.24 d 1.12 g/ml Clear, Colorless to light yellow liquid $C_{11}H_{16}O_5$	25420-50	50 ml
Glycidyl butyl ether [2426-08-6] *HW7g* (2,3-Epoxypropyl butyl ether) MW 130.2 bp 164–166° n^{20}_D 1.419 TSCA For modification of carboxyl-,amine-, and hydroxyl- function polymers. Additive used to reduce viscosity in epoxy embedding resins.	05678-500	500 g
Glycidyl cinnamate [19532-86-6] *HU7g* MW 204.2 bp 180–183°/3mm n^{20}_D 1.575 Can be reacted with groups such as hydroxyl, amine or carboxyl to introduce photocrosslinkable sites.	16090-10	10 g
Glycidyl Glycerol-Ether, Polyfunctional [25038-04-4] *H4g* TSCA Effective crosslinker for hydroxyl-, amine-, and carboxylic acid-functional polymers. WPA 140-160.	09221-50	50 g
Glycidyl methacrylate [106-91-2] *BEV7d* MW 142.2 bp 182° Tg 41° n^{20}_D 1.449 100 ppm MEHQ TSCA Reactive ester monomer for preparation of other monomers and introduction of reactive sites into polymers.	02607-500	500 g
Glycidyl nonylphenyl ether *U4g* MW 276.4 Reactive hydrophobic ether. Min. 87% WPE 330.	18236-100	100 g

	Catalog #	Size
Glycolide, 99.9% [502-97-6] *B6bf* MW 116.1 mp 84° TSCA	17085-10 17085-50	10 g 50 g

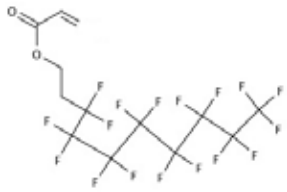


H

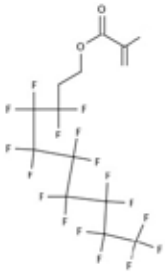
(HEMA 10) Poly Ethoxy (10) ethyl methacrylate [25736-86-1] *H5ad* MW 526 800 ppm Viscous Liquid Ethylene oxide, moles: 10 Active content (%): 90 Moisture content (%): 0.5 Hydroxyl number (meq KOH/mg): 98 This homolog of HEMA bears 10 ethoxy units on the ester linkage. These water soluble pendant, nonionic side chains not only increase water compatibility in the polymer but can enhance stabilization of latex systems alone or in combination with added non-ionic surfactants.	24890-100	100 g



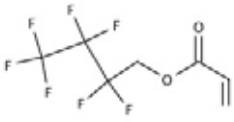
1H,1H,2H,2H-Heptadecafluorodecyl acrylate [27905-45-9] *BHO6d* MW 518.2 bp 100°/4mm Tg 0° n_D^{20} 1.337 100 ppm MEHQ TSCA $H_2C=CHCO_2CH_2CH_2(CF_2)_7CF_3$ Low refractive index monomer. Polymer RI: ~1.34	19227-25 19227-100	25 g 100 g



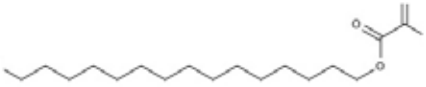
1H,1H,2H,2H-Heptadecafluorodecyl methacrylate [1996-88-9] *BHO6d* MW 532.2 bp 110°/4mm Tg 40° n_D^{20} 1.343 100 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2(CF_2)_7CF_3$ Low refractive index monomer. Polymer RI: ~1.35	19226-25	25 g



1H,1H-Heptafluorobutyl acrylate [424-64-6] *H6g* MW 254.1 bp 57°/30mm Tg -30° n_D^{20} 1.331 100 ppm MEHQ TSCA $H_2C=CHCO_2CH_2CF_2CF_2CF_3$ Low refractive index monomer. Polymer n = 1.367	21039-25	25 g

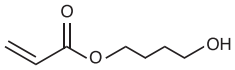
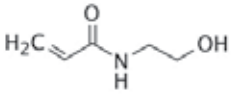
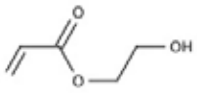
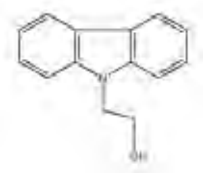
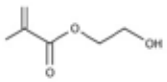


1-Hexadecyl methacrylate [2495-27-4] *EHOV7d* MW 310.5 Tg 22° n_D^{20} 1.341 100 ppm HQ TSCA Highly hydrophobic ester monomer.	02396-25	25 g



	Catalog #	Size
1H,1H,3H-Hexafluorobutyl acrylate [54052-90-3] *CHO5d* MW 236.1 bp 48°/12mm Tg -22° n_D^{20} 1.352 100 ppm HQ $H_2C=CHCO_2CH_2CF_2CH(F)CF_3$ Low refractive index monomer. Polymer RI: 1.392	05631-10	10 g
1H,1H,3H-Hexafluorobutyl methacrylate [36405-47-7] *EHO5d* MW 250.2 bp 159° n_D^{20} 1.361 100 ppm HQ TSCA $H_2C=C(CH_3)CO_2CH_2CF_2CH(F)CF_3$ Low refractive index monomer. Polymer RI: ~1.40	05632-10	10 g
Bis-(1,1,1,3,3,3-Hexafluoroisopropyl) Itaconate [98452-82-5] *HU4d* Bis-(Hexafluoroisopropyl) Itaconate MW 430.14 bp 75–77° @ 12mm n_D^{20} 1.33 d 1.54 grams/mL Clear, colorless liquid TSCA $C_{11}H_6F_{12}O_4$ Fluoromonomer useful in producing polymers for the formulation of plastics with high performance and unique strength and durability. Fluoropolymers created from fluoromonomers are high value added materials with unique properties including chemical and heat resistance and the ability to withstand corrosion. Products made from fluoropolymers include surfactants, optical fibers, biomaterials, coatings for nonstick bakeware and membranes for fuel cells.	24971-25	25 g
1,1,1,3,3,3-Hexafluoroisopropyl Acrylate [2160-89-6] *CH7d* MW 222.09 bp 65–68° @ 165mm n_D^{20} 1.319 d 1.33 grams/mL 10° C / 50° C 200 ppm of MEHQ Clear, colorless liquid $H_2C=CHCO_2CH(CF_3)_2$ Fluoromonomer useful in producing polymers for the formulation of plastics with high performance and unique strength and durability. Fluoropolymers created from fluoromonomers are high value added materials with unique properties including chemical and heat resistance and the ability to withstand corrosion. Products made from fluoropolymers include surfactants, optical fibers, biomaterials, coatings for nonstick bakeware and membranes for fuel cells. Requires Cold Pack	24970-25	25 g
Hexafluoro-iso-propyl methacrylate [3063-94-3] *CH6g* MW 236.1 bp 50°/140mm n_D^{20} 1.331 50 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH(CF_3)_2$ Low refractive index monomer. Polymer RI: ~1.38	02401-10	10 g

	Catalog #	Size
N,N'-Hexamethylenebisacrylamide [7150-41-6] *U7d* MW 224.2 mp 135-145° C $[H_2C=CHCONH(CH_2)_3]_2$ Crosslinking amide monomer, greater hydrolytic stability than corresponding esters. May contain insoluble impurity. If desired, filter before using.	01495-5	5 g
1,6-Hexanediol diacrylate [13048-33-4] *HO4g* MW 226.3 bp 295° Tg 43° n^{20}_D 1.456 HQ(HPLC) 75–125 ppm, MEHQ 0–45 ppm TSCA $[H_2C=CHCO_2(CH_2)_3-]_2$ Crosslinking monomer.	23671-100	100 g
1,6-Hexanediol dimethacrylate, min 98% [6606-59-3] *HO5g* MW 254.3 bp >315° n^{20}_D 1.458 100 ppm HQ TSCA $[H_2C=C(CH_3)CO_2(CH_2)_3-]_2$ Crosslinking monomer.	23672-100	100 g
n-Hexyl acrylate, min. 98% [2499-95-8] *EHOV7d* MW 156.2 bp 190° Tg -45° n^{20}_D 1.428 85 ppm HQ TSCA $CH_2=CHCO_2(CH_2)_5CH_3$ Hydrophobic, low Tg, ester monomer.	02411-100	100 g
2,2-Bis[4-(2-hydroxy-3-methacryloxypropoxy)phenyl]propane [1565-94-2] *A2d* (Bis-GMA) MW 510.6 bp Gels before boiling n^{20}_D 1.550 100 ppm MEHQ TSCA $[H_2C=C(CH_3)CO_2CH_2CH(OH)CH_2OC_6H_4-4-]_2$ Rigid, hydrophobic, Crosslinking monomer.	03344-100 03344-500	100 g 500 g
2-(2'-Hydroxy-5'-methylphenyl)-benzotriazole [244-22-4] *HO4g* (Tinuvin P®) MW 225.2 mp 128–132° d 1.40 yellow granules A highly efficient UV absorbent *(absorbs UV between 270-340nm)* used in polystyrene, polyester, polycarbonate, Perspex, polyethylene, ABS resin, epoxy resin and cellulose resin. Absorbs almost no visible light, making it useful for colorless transparent and pale colored products. Can be used in plastic products for food.	21363-25	25 g
2-hydroxy-3-chloropropyl methacrylate [13159-52-9] MW 178.61 bp 108° C/5 mmHg d 1.20 g/mL Clear, colorless to slightly pale liquid $C_7H_{11}ClO$ Stabilized with HQ aka: Methacrylic acid 3-Chloro-2-hydroxypropyl ester.	25421-50	50 ml

	Catalog #	Size
4-Hydroxybutyl acrylate [2478-10-6] MW 144.17 bp 95 ° C/0.1 mmHg n_D^{20} 1.452 d 1.041 g/mL at 25° C MEHQ Colorless to brown liquid $C_7H_{12}O_3$ Increases the hydrophilic properties of polymers when copolymerized into a range of acrylate and methacrylate systems. This monomer has been used polymers for contact lenses and other ophthalmic devices. 	25352-50 25352-100	50 g 100 g
N-Hydroxyethyl acrylamide, 98% [7646-67-5] MW 115.13 bp 130° C / 0.1 mm Hg n_D^{20} 1.505 d 1.12 g/mL at 25° C 3,000 ppm MEHQ Colorless to pale yellow liquid $C_5H_9NO_2$ Increases the hydrophilic properties of polymers when copolymerized into a range of acrylate and methacrylate systems. This monomer has been used in hydrogel systems for ocular delivery of ophthalmic drugs. The homopolymer has been used as a novel adsorbed coating for protein separation by capillary electrophoresis.  *For the use of N-hydroxyethyl acrylamide in ophthalmic hydrogels for drug delivery, see: Ribeiro, A., et al. Biomacromolecules, Article ASAP on-line publication February 11, 2011 (http://pubs.acs.org/doi/abs/10.1021/bm101562v)*	25109-50 25109-100	50 g 100 g
2-Hydroxyethyl acrylate [818-61-1] *BHOR6g* MW 116.1 bp 90°/12mm Tg 15° n_D^{20} 1.450 350–650 ppm MEHQ TSCA $H_2C{=}CHCO_2CH_2CH_2OH$ Hydrophilic monomer, reactive site for reactions. 	01902-250	250 g
N-(2-Hydroxyethyl) carbazole, min. 97% *U5g* mp 78°–84° C An alcohol which can be esterified with a variety of monomeric acids. 	24596-5	5 g
2-Hydroxyethyl methacrylate [868-77-9] *HO2g* (glycol methacrylate) TSCA $H_2C{=}C(CH_3)CO_2CH_2CH_2OH$ 2-Hydroxyethyl methacrylate (HEMA) is perhaps the most widely studied and used neutral hydrophilic monomer. The monomer is soluble, its homopolymer is water-insoluble but plasticized and swollen in water. This monomer is the basis for many hydrogel products such as soft contact lenses, as well as polymer binders for controlled drug release, absorbants for body fluids and lubricious coatings. As a comonomer with other ester monomers, HEMA can be used to control hydrophobicity or introduce reactive sites. 		
Ophthalmic Grade – Purity % = min. 99; Acid Content % = max 0.05; EGDMA content % = max 0.15; Color = 30 MW 130.1 n_D^{20} 1.453 7–13 MEHQ Tg 55°	04675-100 04675-500	100 g 500 g
Low Acid Grade – Purity % = min. 98; Acid Content % = max 0.10; EGDMA content % = max 0.2; Color = 30 MW 116.1 bp 90°/12mm n_D^{20} 1.453 180–220 MEHQ Tg 15°	03699-100 03699-500 03699-1	100 g 500 g 1 kg
Technical Grade – Purity % = min. 97; Acid Content % = max 1.5; EGDMA content % = max 0.2; Color = 50 MW 130.1 n_D^{20} 130.1 180–220 MEHQ Tg 15°	00227-1	1 kg

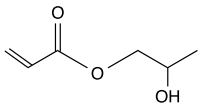
	Catalog #	Size

Hydroxypolyethoxy (10) Allyl Ether, 98% [27274-31-3] *H4d* . . . . . 24899-100 100 g

MW 498 Low viscosity Liquid
Purity: 98% Ethylene oxide, moles: 10 Active content (%): 99 Moisture content (%): 0.2 Hydroxyl number (mg KOH/mg): 115
Difunctional molecule reactive in vinyl polymerization through its allylic group, to impart hydrophilic properties to aqueous solution or emulsion polymers. In particular, solution copolymers of Hydroxypolyethoxy (10) Allyl Ether with Acrylic acid have shown useful properties as dispersants and scale inhibitors in boiler water applications.Hydroxypolyethoxy (10) Allyl Ether is a high purity material, clear, slightly viscous liquid (5 cps at 20°C) which undergoes partial solidification below 10° C to form a viscous paste. Soluble in water as well as alcohols and aromatic solvents.

2-hydroxypropyl acrylate [999-61-1] . . . . . 25353-50 50 g
25353-100 100 g

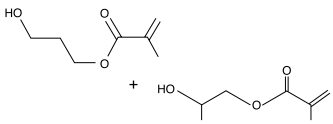
MW 130.14 bp 210° C (1 atm) n_D^{20} 1.4432 d 1.049 g/mL at 25° C
MEHQ inhibitor 350–650 ppm Colorless to pale yellow liquid
$C_6H_{10}O_3$
Increases the hydrophilic properties of polymers when copolymerized into a range of acrylate and methacrylate systems. This monomer has been used in hydrogel polymers and in RAFT polymerizations.



Pascual,B.; Castellano, I.; Vazquez, B.; Gurruchaga, M.; Goñi, I. Polymer, 1996, 37(6), 1005-1011.
Vo,C.D.; Rosselgong, J. and Armes, S.P.; Billingham, N.C.Macromolecules, 2007, 40 (20), 7119–7125

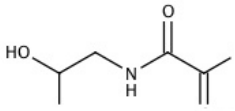
Hydroxypropyl methacrylate, mixture of isomers [27813-02-1] *H4g* . . . . . 00730-500 500 g
00730-1 1 kg

MW 144.2 bp 93–95°/9mm n_D^{20}1.447 200 ppm MEHQ TSCA
$H_2C=C(CH_3)CO_2C_3H_6OH$
Hydrophilic monomer.



N-(2-Hydroxypropyl)methacrylamide [21442-01-3] *U6d* . . . . . 08242-10 10 g

MW 143.2 mp 67°
$H_3CCH(OH)CH_2NHCOC(CH_3)=CH_2$
Hydrolytically stable hydrophilic monomer.



I

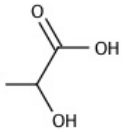
New! N-(Isobutoxymethyl)acrylamide [16669-59-3] *B4d* . . . . . 25998-50 50 ml

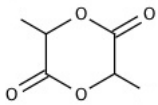
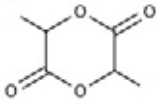
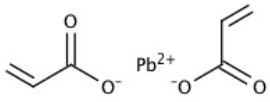
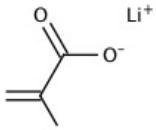
MW 157.21 g/mol bp 108° C (lit.) n_D^{20}1.461 d 0.97 g/mL at 25° C (lit.) 200 ppm mono-methyl ether hydroquinone
For thermally crosslinking polymers, especially under acid conditions.

L

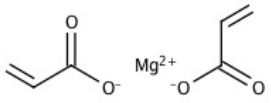
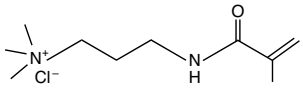
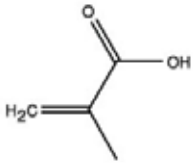
L-Lactic Acid [79-33-4] *H2g* . . . . . 24618-250 250 g

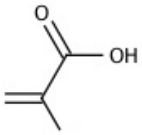
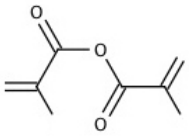
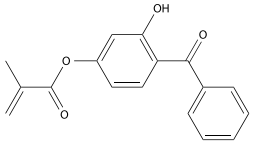
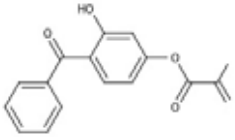
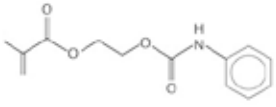
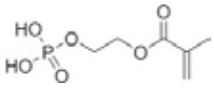
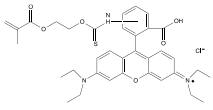
88% Active, remainder is water.



	Catalog #	Size
l-(-)Lactide [4511-42-6] *H3bd* MW 144.1 mp 95–97° TSCA Synthesis of biodegradable homo- and copolymers. 	05749-100	100 g
dl-Lactide [95-96-5] *A2bd* MW 144.1 mp 124–126° TSCA Synthesis of biodegradable homo- and copolymers. 	16640-100	100 g
Lead acrylate [867-47-0] *EHOUV7g* MW 349.3 Imparts x-ray opacity to polymers. 	02968-100	100 g
Lithium methacrylate [13234-23-6] *U6d* MW 92 $H_2C=C(CH_3)CO_2Li$ Water-soluble methacrylic acid salt. 	17117-50	50 g

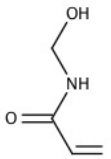
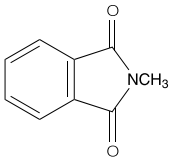
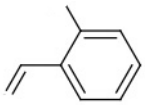
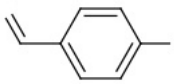
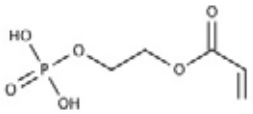
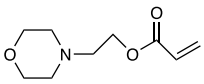
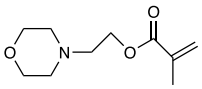
M

Magnesium acrylate [5698-98-6] *EHOV7d* MW 166.4 Tg 400° TSCA $(H_2C=CHCO_2)_2Mg$ Polymerizable metal salt. 	02467-10	10 g
Methacrylamidopropyltrimethylammonium chloride [51410-72-1] *A4g* MW 220.7 ~600 ppm MEHQ TSCA $H_2C=C(CH_3)CONH(CH_2)_3N(CH_3)_3Cl$ Quaternary ammonium monomer. 50% soln. in water. 	09657-100	100 g
Methacrylic Acid, 99.9% [79-41-4] *BOW6d* MW 86 200 ppm MEHQ Clear Liquid $H_2C=C(CH_3)COOH$ High purity monomer for contact lens applications. High purity carboxylated monomers increase the hydrophilicity in polymers and provide crosslinking sites for divalent ions (e.g. Zn++). Polysciences, Inc. offers both methacrylic acid in high purity (99.9%) and a longer chain analog, Beta-Carboxyethyl acrylate, (99%) 	24897-250	250 g

	Catalog #	Size
Methacrylic acid, min. 99.5% [79-41-4] *BHO6g* MW 86.1 bp 163° Tg 185° n_D^{20} 1.431 180–275 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2H$ Carboxylic acid monomer widely used to improve adhesion and introduce reactive sites into polymers. Homopolymers are water-soluble. 	00212-450	450 g
Methacrylic anhydride [760-93-0] *BEKX5g* MW 154.2 bp 80–85°/8mm n_D^{20} 1.453 2000 ppm BHT TSCA $[H_2C=C(CH_3)CO]_2O$ Reactive monomer used primarily in preparation of other monomers under mild reaction conditions. Homopolymers are linear and contain cyclic anhydride units, uncrosslinked. 	01517-100	100 ml
4-Methacryloxy-2-hydroxybenzophenone, min 99% [2035-72-5] *U5d* MW 282.3 mp 70–72° λ max (MeOH) 205nm (ε = 3.03 x 104) 275nm (ε = 1.18 x 104) 325nm (ε = 7.23 x 103) UV absorbing monomer, especially for ophthalmic and optic applications. Technical Data Sheet #514 	23350-25	25 g
4-Methacryloxy-2-hydroxybenzophenone, min 94% [2035-72-5] *U5d* MW 282.3 mp 70–72° Min. 94% λ max (MeOH)205nm (ε = 3.03 x 10^4)275nm (ε = 1.18 x 10^4)325nm (ε = 7.23 x 10^3) UV absorbing monomer, especially for ophthalmic and optic applications. Technical Data Sheet #514 	16989-25	25 g
2-methacryloxyethyl phenyl urethane (MAPU) [51727-47-0] *H3bd* MW 249.2 100–250 ppm MEHQ White crystalline powder $C_{13}H_{15}NO_4$ Hydrophilic monomer useful in medical device and ophthalmic applications. 	25507-100 25507-500	100 g 500 g
2-(Methacryloxy)ethyl phosphate [52628-03-2] MW 210.12 d 1.37 g/mL Colorless, viscous liquid $C_6H_{11}O_6P$ Contains 700 – 1000 ppm monomethyl ether hydroquinone and approximately 25% of diester. 	25422-50	50 ml
Methacryloxyethyl thiocarbamoyl rhodamine B *U5ag* (N-[9-(2-carboxy-x-methacryloxy-ethylthiocarbamoylphenyl)-6-diethylamino-3H-xanthen-3-ylidene]-N-ethyl-ethanaminium chloride; PolyFluor® 570) MW 683.24 Fluorescent monomer. Purple crystals. 	23591-100 23591-1	100 mg 1 g

	Catalog #	Size
4-Methacryloxyethyl trimellitic anhydride [70293-55-9] *U5bd* MW 304.2 mp 95° Reactive monomer, especially in dental applications. Used as adhesion promoter.	17285-10	10 g
2-Methacryloxyethyltrimethylammonium chloride [5039-78-1] *H2d* MW 207.7 700 ppm MEHQ $H_2C=C(CH_3)CO_2CH_2CH_2N(CH_3)_3Cl$ Quaternary ammonium monomer. 70% soln. in water	16639-100	100 g
2-(2′-Methacryloxy-5′-methylphenyl)benzotriazole [188680-81-1] *U7ad* MW 293.3 mp 57–59° UV absorbing monomer.	21871-25	25 g
3-Methacryloxypropyltrimethoxysilane [2530-85-0] *EH5g* MW 248.1 bp 80°/1mm n^{20}_D 1.431 TSCA $H_2C=C(CH_3)CO_2(CH_2)_3Si(OCH_3)_3$ Polymerizable silica-reactive monomer. Provides adhesion to silaceous surfaces.	02476-250	250 g
Methacryloyl chloride, min. 80% [920-46-7] *BCPRS6d* MW 104.5 bp 95–96° n^{20}_D 1.442 200 ppm PTZ TSCA $H_2C=C(CH_3)COCl$ Reactive monomer. Can be used to prepare other monomers or reactive polymers. **Special packaging charge, for sale in United States only. Shipping by truck only.*	01518-50 01518-100	50 g 100 g
Methacryloyl fluoride [381-67-9] *BCPRS6d* MW 88.1 bp 56–58° n^{20}_D 1.370 300 ppm PTZ Reactive building block monomer. Also used to prepare other specialty monomers.	17414-25	25 g
O-Methacryloyl Hoechst 33258 *U2d* [(2′-4-methacryloxyphenyl)-5-(4-methyl-1-piperazinyl)-2,5′-bibenzimidazolyl trihydrochloride; PolyFluor® 497) MW 601.9 mp >280° n^{20}_D 1.370 300 ppm PTZ Fluorescent monomer. Off-white crystals	23592-100	100 mg
Methacryloyl-L-Lysine [45158-94-9] *U6g* MW 214 $C_{10}H_{18}N_2O_3$ Can be used as a building block for producing custom made polymers with pendant amine functionality.	24315-5	5 g

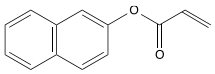
	Catalog #	Size
Methacryloylcholine methyl sulfate, 40% soln. in water [6891-44-7] *H5ad* MW 283.3 800 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2N(CH_3)_3(OSO_3CH_3)$ Quaternary ammonium monomer.	05810-100	100 g
2-Methoxyethyl acrylate [3121-61-7] *EHW5d* MW 130.2 Tg -50° n_D^{20} D 1.427 50 ppm MEHQ inhibitor $H_2C=CHCO_2CH_2CH_2OCH_3$ Low Tg, more polar than butyl acrylate. Requires Poison Pack	02487-100	100 g
2-Methoxyethyl methacrylate, min.85% [6976-93-8] *U6d* MW 144.2 bp 66–67°/11mm Tg 16° n_D^{20} 1.431 100 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2OCH_3$ More polar than butyl methacrylate with similar Tg.	02488-100	100 g
Methyl 2-cyanoacrylate [137-05-3] *H5d* MW 111.1 bp (2 mm Hg) 51° C TSCA Used in rapidly setting cements, e.g., Crazy Glue®. Can be copolymerized with conventional monomers by using free radical initiators.	01520-10	10 g
Methyl methacrylate, min 99.5% [80-62-6] *CHO5g* MW 100.1 bp 99–100° n_D^{20} 1.414 25 ppm HQ Tg 105° $H_2C=C(CH_3)CO_2CH_3$ Widely used in preparation of stable, hard, polymers.	00834-1 00834-5 00834-3.8 00834-4	1 liter 5 gal 3.8 liters 4 x 1 liter
N-methyl N-vinyl acetamide [3195-78-6] *EH6dg* MW 99.1 bp 70° C, 25 mm Hg Colorless liquid TSCA C_5H_9NO Specialty monomer with affinity for water and solvents. Water white liquid has both hydrophobic and hydrophilic character, and is known to undergo polymerization reactions in water or in hydrocarbon solvents with traditional free radical catalysts. Versatility to react with co-monomers such as acrylamide, vinyl acetate and methyl methacrylate allows a wide range of polymeric compositions to be made. Limited shelf life in water, decomposes rapidly under low pH conditions. Available in convenient protective foil packages for laboratory scale, and in bulk quantities for larger projects. Call for custom quotations.	22065-25	25 g
N,N'-Methylenebisacrylamide, Chemzymes®; Ultra Pure, Purity >99% [110-26-9] *V4g* MW 154.17 mp 300° TSCA $(H_2C=CHCONH)_2CH_2$ High purity crosslinking monomer used for precision PAGE. Also suitable for UV scanning gels. Crosslinking monomer used especially with acrylamide. Purity >99% Conductivity of 2% soln/ <5mmho Technical Data Sheet #479	00719-25 00719-100	25 g 100 g

	Catalog #	Size
N-Methylolacrylamide, 48% soln. in water [924-42-5] *HV5g* MW 101.1 TSCA $H_2C=CHCONHCH_2OH$ Reactive, acid-curing, monomer, produces post-crosslinking site in polymers. 	02518-250	250 g
N-Methylphthalimide [550-44-7] *H4g* MW 161.1 mp ~137° C Valuable synthon used as a chemical intermediate for synthesis of dyes, drugs, agricultural chemicals, and in coatings and adhesive formulations. 	24281-25	25 g
2-Methylstyrene [611-15-4] *H2d* MW 118.2 bp 171° Tg 120° n_D^{20} 1.544 0.1% t-butylcatechol $2\text{-}CH_3C_6H_4CH=CH_2$ Substituted styrene monomer. 	04581-5	5 g
4-Methylstyrene [622-97-9] *EH5d* MW 118.2 mp -34° bp 170° Tg 108° n_D^{20} 1.542 25 ppm t-butylcatechol TSCA $CH_3C_6H_4CH=CH_2$ Substituted styrene monomer. 	04234-100	100 g
Monoacryloxyethyl phosphate [32120-16-4] *B4f* MW 196.1 2000 ppm MEHQ TSCA Water-soluble phosphoric acid ester monomer. Contains Bis(2-Acryloxyethyl) Phosphate. 	22468-10	10 g
2-N-Morpholinoethyl acrylate, 95% [19727-38-9] *HO4g* MW 185.2 bp 67°/0.2mm 100 ppm MEHQ Cationic monomer. 	17977-10 17977-100	10 g 100 g
2-N-Morpholinoethyl methacrylate, 95% [2997-88-8] *EOV7g* MW 199.2 bp 78°/1.7mbar 100 ppm MEHQ Cationic monomer. 	17978-10 17978-100	10 g 100 g

	Catalog #	Size

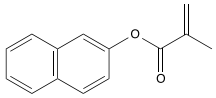
N

2-Naphthyl acrylate [52684-34-1] *U6d*
MW 268.4 bp 138°/0.4mm Tg 24°
Fluorescent monomer.



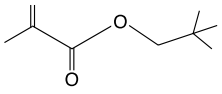
06024-1 — 1 g

2-Naphthyl methacrylate [10475-46-4] *U4d*
MW 212.2 mp 62–64° Colorless crystals
PolyFluor® 345. Fluorescent monomer.



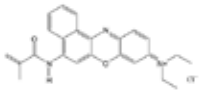
23602-100 — 100 mg
23602-1 — 1 g

Neopentyl methacrylate [2397-76-4] *EHOV7d*
MW 156.3 100 ppm MEHQ
$C_2H_5C(CH_3)_2OCOC(CH_3)=CH_2$
Neutral ester monomer.



06127-10 — 10 g

Nile Blue Acrylamide [699018-10-5]
MW 408 Dark blue crystals
$C_{23}H_{22}N_3O_2Cl$

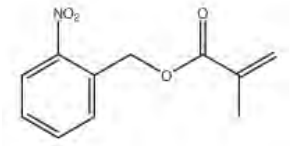


Nile Blue dye itself is a fluorescent dye that is used routinely in histology to impart a blue color to cell nuclei, where it highlights the distinction between neutral lipids (triglycerides, etc.) which are stained pink and fatty acids, which are stained blue. Nile Blue Acrylamide has also been used to covalently link Nile Blue dye into the backbone of polymers for use in various sensor applications.

1. Chandrasekharan, N.; Ibrahim, S.; Kostov, Y.; Rao, G. Bioautomation 9 (2008) 31-39. 2. Pham, H., et al J. Mater. Chem. 17 (2007) 523-526.

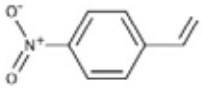
25395-100 — 100 mg

o-Nitrobenzyl methacrylate, min. 95% *U7d*
100 ppm HQ
Blocked carboxylic acid monomer.



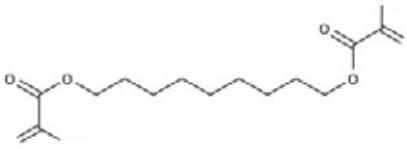
24360-10 — 10 g

4-Nitrostyrene [100-13-0] *U6d*
MW 149.2 mp 18–19° bp 120°/10mm
$4\text{-}NO_2C_6H_4CH=CH_2$
Polar styrene monomer. Can be used to introduce amino groups into polymers.



02634-5 — 5 g

1,9-Nonanediol dimethacrylate [65833-30-9] *U7d*
MW 296.4 100 ppm HQ
$[H_2C=C(CH_3)CO_2(CH_2)_4]_2\text{–}CH_2$
Long-chain crosslinking monomer.

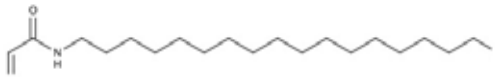


00801-10 — 10 g

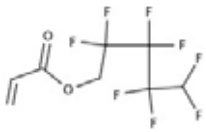
	Catalog #	Size

O

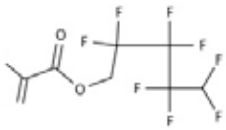
N-(n-Octadecyl)acrylamide [1506-54-3] *U2d* — 04673-10 — 10 g
MW 323.6 mp 74.5–75.5°
$H_3C(CH_2)_{17}NHCOCH=CH_2$
Hydrophobic acrylamide monomer.



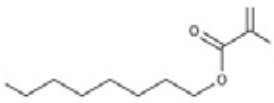
1H,1H,5H-Octafluoropentyl acrylate [376-84-1] *B4d* — 21044-25 — 25 g
MW 286.1 bp 56°/8mm Tg -35° n_D^{20} 1.349 100 ppm MEHQ
$H_2C=CHCO_2CH_2(CF_2)_3CHF_2$
Low refractive index monomer. Polymer RI: 1.380.



1H,1H,5H-Octafluoropentyl methacrylate, min. 98% [355-93-1] *EH4g* — 21045-25 — 25 g
MW 300.2 bp 178–9° Tg 36° n_D^{20} 1.358 100 ppm MEHQ
$H_2C=C(CH_3)CO_2CH_2(CF_2)_3CHF_2$
Low refractive index monomer. Polymer RI: ~1.39

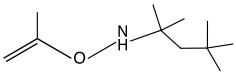


n-Octyl methacrylate, 99+% [2157-01-9] *EU6d* — 23355-25 — 25 g
MW 198.3 bp 105°/4mm Tg -20° 100 ppm MEHQ
$H_3C(CH_2)_7OCOC(CH_3)=CH_2$
Hydrophobic methacrylate monomer.



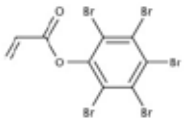
n-Octyl methacrylate [1/9/2157] *EU6d* — 02679-25 — 25 g
MW 198.3 bp 105°/4mm Tg -20° n_D^{20} 1.437 500 ppm MEHQ
$H_3C(CH_2)_7OCOC(CH_3)=CH_2$
Hydrophobic methacrylate monomer.

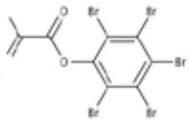
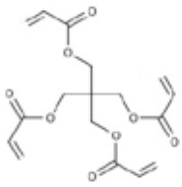
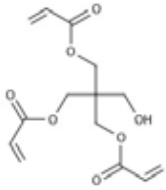
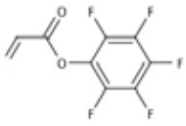
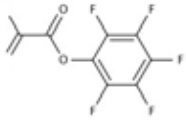
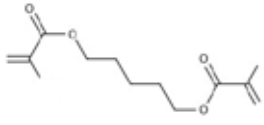
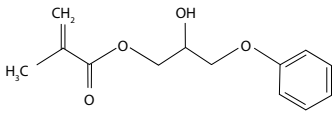
N-tert-Octylacrylamide [4223-03-4] *H5d* — 03141-25 — 25 g
MW 183.3 mp 63.6° TSCA
$H_3C(CH_2)_4C(CH_3)_2NHCOCH=CH_2$
Hydrophobic acrylamide derivative.

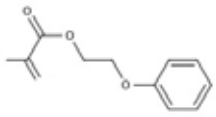
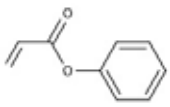
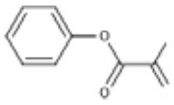
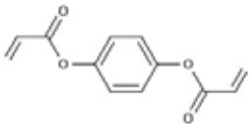
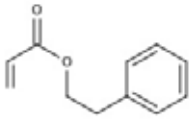
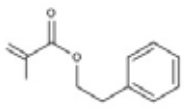
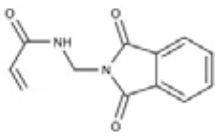


P

Pentabromophenyl acrylate [52660-82-9] *H4d* — 06344-10 — 10 g
MW 542.6 mp 150–153° n_D^{20} (polymer) ~1.7
$C_6Br_5OCOCH=CH_2$
High refractive index monomer.



	Catalog #	Size
Pentabromophenyl methacrylate [18967-31-2] *H6ad* MW 556.7 mp 132–137° n_D^{20} (polymer) 1.71 $C_6Br_5OCOC(CH_3)=CH_2$ High refractive index monomer. 	04253-5 04253-10	5 g 10 g
Pentaerythritol tetraacrylate [4986-89-4] *HO6g* MW 352.4 mp 18° n_D^{20} 1.487 350 ppm MEHQ TSCA $(H_2C=CHCO_2CH_2)_4C$ Crosslinking monomer. 	01547-100	100 g
Pentaerythritol triacrylate [3524-68-3] *H4d* MW 298.3 mp 15° bp >315.5° Tg 103° n_D^{20} 1.484 300–400 ppm MEHQ TSCA $(H_2C=CHCO_2CH_2)_3CCH_2OH$ Crosslinking monomer. 	04259-100	100 g
Pentafluorophenyl acrylate [71195-85-2] *EJOV7d* MW 238.1 bp 145–149° n_D^{20} D = ~1.433 $C_6F_5OCOCH=CH_2$ Low refractive index monomer. Polymer RI: 1.40 	06349-5	5 g
Pentafluorophenyl methacrylate, 95% [13642-97-2] *H6d* MW 252.1 n_D^{20} 1.40 100 ppm MEHQ $C_6F_5OCOC(CH_3)=CH_2$ Low refractive index monomer. 	06350-5	5 g
1,5-Pentanediol dimethacrylate [13675-34-8] *HU5d* MW 240.3 n_D^{20} 1.455 100 ppm HQ TSCA $[H_2C=C(CH_3)CO_2CH_2CH_2]_2-CH_2$ Crosslinking monomer. 	04260-25	25 g
3-Phenoxy 2 hydroxy propyl methacrylate (PHPM) [16926-87-7] *HO3bd* MW 236.26 2500 ppm MEHQ; 1000 ppm BHT Light yellow to slightly amber liquid $C_{13}H_{16}O_4$ Hydrophilic monomer useful in medical device and ophthalmic applications. Technical Data Sheet #989 	25506-100 25506-500	100 g 500 g

	Catalog #	Size
2-Phenoxyethyl methacrylate [10595-06-9] *U5g* MW 206.2 bp 130–132°/8mm Tg 54° n^{20}_D ~1.513 200 ppm HQ and 200 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CH_2OC_6H_5$ UV absorbing monomer. 	02640-100	100 g
Phenyl acrylate, min. 95% [937-41-7] *HU7d* MW 148.2 bp 87–94°/12mm Tg 57° n^{20}_D ~1.58 100 ppm MEHQ TSCA $C_6H_5OCOCH=CH_2$ UV absorbing monomer. 	02642-10	10 g
Phenyl methacrylate , >95% [2177-70-0] *BORVX7d* MW 162.2 bp 115–118°/10mm Tg 110° n^{20}_D1.5120 100 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2C_6H_5$ Moderate UV absorbing monomer. 	02644-10	10 g
1,4-Phenylene diacrylate [6729-79-9] *U5d* MW 218.2 mp 88–89° n^{20}_D 1.531 1,4-$C_6H_4(OCOCH=CH_2)_2$ Rigid aromatic crosslinking monomer. 	06389-10	10 g
2-Phenylethyl acrylate, min. 92% [3530-36-7] *HO5d* MW 176.2 bp 104–106°/5mm Tg -3° n^{20}_D ~1.509 100 ppm PTZ TSCA $C_6H_5CH_2CH_2OCOCH=CH_2$ Moderate UV absorbing monomer useful for ophthalmic applications. 	02834-100	100 g
2-Phenylethyl methacrylate, min. 92% [3638-12-3] *H7d* MW 190.3 bp 119–120°/11mm Tg 26° n^{20}_D= 1.55 100 ppm MEHQ TSCA $C_6H_5CH_2CH_2OCOC(CH_3)=CH_2$ Moderate UV absorbing monomer useful for ophthalmic applications. 	02911-100	100 g
N-(Phthalimidomethyl)acrylamide [80500-44-3] *DU7g* MW 230.2 mp 190° Used as a photoresist and other photosensitive bodies. 	19390-25	25 g

Poly(ethylene glycol) (n) diacrylate [26570-48-9] *HO5g*
TSCA
$H_2C=CHCO(OCH_2CH_2)_nO_2CCH=CH_2$
Long-chain, hydrophilic, crosslinking monomers. (n) value is MW of PEG unit.

					Catalog #	Size
MW 200	n^{20}_D 1.464	750 ppm MEHQ	d. 1.122	Viscosity 25 cps @ 25°	00669-100	100 g
MW 200	n^{20}_D 1.464	750 ppm MEHQ	d 1.122	Viscosity 25 cps @ 25°	00669-250	250 g
MW 400	n^{20}_D 1.4655	500 ppm MEHQ	d 1.117	Viscosity 57 cps @ 25°	01871-250	250 g
MW 1,000	mp 35 - 37° C	~1500 ppm MEHQ			25485-1	1 g
					25485-5	5 g
MW 4,000	mp 56 - 60°				15246-1	1 g

Poly(ethylene glycol) (n) dimethacrylate [25852-47-5] *H5g*
TSCA $CH_2C=CCH_3CO(OCH_2CH_2)_nO_2CC(CH_3)=CH_2$
Long-chain hydrophilic, crosslinking monomers. (n) value is MW of PEG unit.

MW 200	n^{20}_D 1.460	75 ppm HQ	d 1.08	Viscosity 15 cps @ 25° C	00096-100	100 g
MW 400	n^{20}_D 1.465	245 ppm MEHQ	d 1.117	Viscosity 85 cps @ 25° C	15179-100	100 g
MW 600	n^{20}_D 1.466	1,000 ppm MEHQ	d 1.101	Viscosity 7 cps @ 25° C	02364-100	100 g
MW 1,000	n^{20}_D 1.460	90 ppm MEHQ & 250 ppm BHT	d 1.10	Viscosity 76 cps @ 40° C	15178-100	100 g
MW 8,000	mp 54-57° C	white solid			25428-2	2 g
					25428-10	10 g
MW Mn ~20K	bp >250° C	white solid			25406-5	5 g
					25406-25	25 g

Poly(ethylene glycol) (n) monomethacrylate [25736-86-1] *H5ad*
TSCA
$H_2C=C(CH_3)CO(OCH_2CH_2)_nOH$
Long-chain hydrophilic macromonomers. Used to introduce hydrophilic sites into polymers, to stabilize emulsion polymers, and to prepare comb polymers. (n) value is MW of PEG unit.

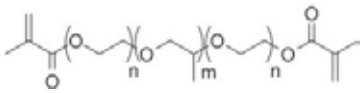
MW 200	n^{20}_D 1.105	up to 700 ppm MEHQ inhibitor	16712-100	100 g
MW 400	n^{20}_D 1.114	800-1,000 ppm MEHQ inhibitor	16713-100	100 g
MW 2,000	mp 48 - 51°		25427-1	1 g
			25427-5	5 g

Poly(ethylene glycol) (n) monomethyl ether monomethacrylate [26915-72-0] *BHJO6d*
TSCA
$H_2C=C(CH_3)CO_2(CH_2CH_2O)_nCH_3$
Hydrophilic monomer used to introduce hydrophilic sites into polymers, to stabilize polymer emulsions and synthesis of comb polymers. (n) value is MW of PEG unit.

MW 200	n^{25}_D 1.449	100 ppm MEHQ and 300 ppm BHT inhibitor	16664-100	100 g
			16664-500	500 g
MW 400	n^{25}_D 1.457	Tg -62° 100 ppm MEHQ and 200 ppm BHT inhibitor	16665-100	100 g
			16665-500	500 g
MW 1,000	n^{25}_D 1.46	Tg 40° 100 ppm MEHQ and 300 ppm BHT inhibitor	16666-100	100 g
			16666-500	500 g

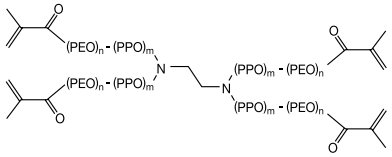
	Catalog #	Size
MW 1,900 mp 51-53°C	25425-1	1 g
	25425-5	5 g
MW of PEG Block 5,000 mp 58-60°C	25426-1	1 g
	25426-5	5 g

PEO(5800)-b-PPO(3000)-b-PEO(5800) dimethacrylate *U4abd*
MW 14,600 mp 56° C White solid
Long-chain hydrophilic, crosslinking macromonomer. Triblock copolymer with methacrylate endgroups contains blocks of PEO and PPO to provide a balance of hydrophilic and hydrophobic properties.



25430-1 1 g
25430-5 5 g

[PEO(10700)-b-PPO(4500)]4-ethylenediamine tetramethacrylate *U4abd*
MW 60,800 mp 45–47° C White solid
Long-chain branched hydrophilic, crosslinking macromonomer. Block copolymer with methacrylate endgroups on each of the 4 arms contains blocks of PEO and PPO to provide a balance of hydrophilic and hydrophobic properties.

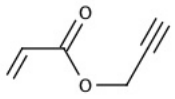


25429-1 1 g
25429-5 5 g

Poly(propylene glycol) dimethacrylate [25852-49-7] *HO7d*
MW of PEG Block = 400 bp >300° n_D^{20} 1.452 d 1.01 100 ppm MEHQ & 100 ppm BHT TSCA
$H_2C=C(CH_3)CO(OC_3H_6)_nO_2CC(CH_3)=CH_2$
Water-insoluble crosslinking monomer. (n) value is MW of PEG unit.

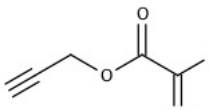
04380-250 250 g

Propargyl acrylate [10477-47-1] *CVWX6d*
MW 110.1 bp 138° n_D^{20} 1.446 TSCA
Acetylenic monomer. Polymer can be derivatized and possible oxidatively crosslinked.



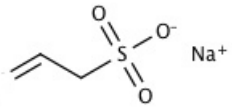
02964-25 25 g

Propargyl methacrylate [13861-22-8] *U4ad*
MW 124.1 bp 149–151° n_D^{20} 1.448 TSCA
$HCCCH_2OCOC(CH_3)=CH_2$
Acetylenic monomer. Polymer can be derivatized and possible oxidatively crosslinked.

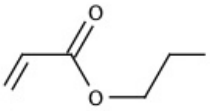
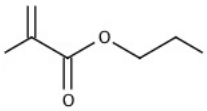
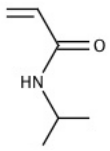
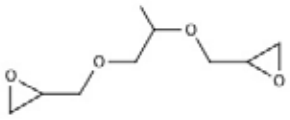
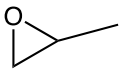
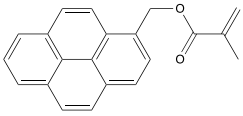


02965-25 25 g

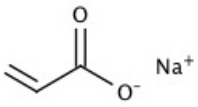
2-Propene-1-sulfonic acid, sodium salt, 35% soln. in water [2495-39-8] *HJU2g*
MW 144.1 TSCA
$H_2C\text{-}CHCH_2SO_3Na$
Water-soluble anionic monomer. Used to introduce polar, ionic sites into polymers.

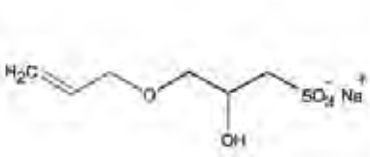
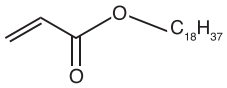
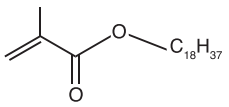
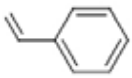
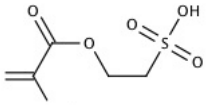
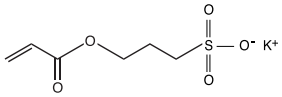
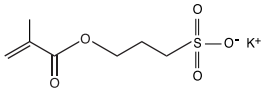
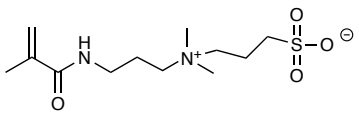


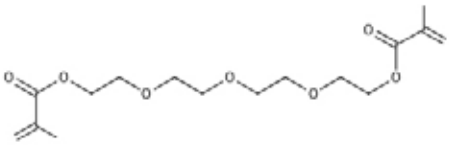
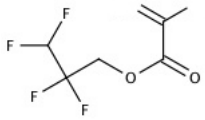
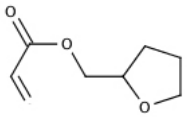
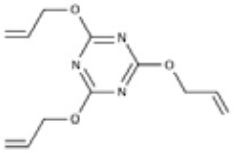
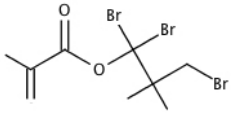
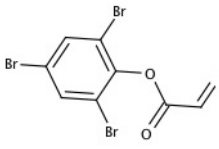
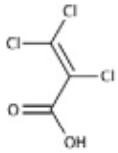
00064-10 10 g

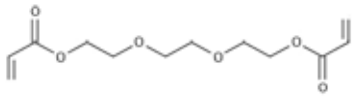
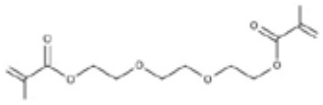
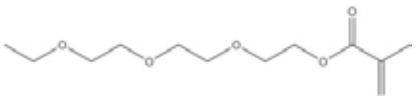
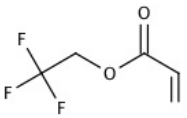
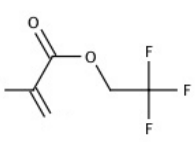
	Catalog #	Size
n-Propyl acrylate [925-60-0] *EHJ4d* MW 114.2 bp 43–44°/40mm Tg -37° n_D^{20}1.413 500 ppm MEHQ TSCA Neutral ester monomer. 	03132-25	25 g
n-Propyl methacrylate [2210-28-8] *EU5d* MW 128.2 bp 140–141° Tg 35° n_D^{20} 1.419 100 ppm MEHQ TSCA $H_3CCH_2CH_2OCOC(CH_3)=CH_2$ Neutral ester monomer. 	03174-100	100 g
N-iso-Propylacrylamide [2210-25-5] *H5g* MW 113.2 mp 64–65° Tg 85° TSCA $H_2C=CHCONHCH(CH_3)_2$ Water-soluble monomers. Polymers are water-soluble at room temperature but are insoluble at slightly higher temperatures. 	02455-25 02455-100	25 g 100 g
Propylene glycol diglycidyl ether [16096-30-3] *H4g* Crosslinker for amine-, hydroxyl-, and carboxyl-functional polymers. WPE ~150 	24044-100	100 g
Propylene Oxide, EM Grade [75-56-9] *BCHV6g* MW 58.08 bp 34° n_D^{20} 1.366 d 0.83 TSCA Solvent used in the last stage of dehydration of tissue for epoxy embedding. Requires Posion Pack 	00236-1	1 pint
1-Pyrenylmethyl methacrylate [86112-79-0] *U5g* MW 300.3 mp 99–101° Pale yellow crystals Fluorescent monomer. PolyFluor® 394 **Ex. max**: 339nm **Em. Max**: 394nm 	23588-100 23588-1	100 mg 1 g

S

Sodium acrylate [7446-81-3] *H5g* MW 94.1 Tg 230° TSCA $H_2C=CHCO_2Na$ Polymerizable acid salt. 	01207-50	50 g

	Catalog #	Size
Sodium 1-Allyloxy-2 hydroxypropyl Sulfonate [52556-42-0] *H4d* MW 218 Water (%): 60 Active Polymer (% in aq. sol.): 40 pH (10% in water): 7.5 Sodium salt of the allyl ether sulfonate. It readily undergoes vinyl polymerization reactions in aqueous or emulsion systems and provides a bound source of anionically charged sulfonate groups in a polymer backbone. 	24898-100	100 g
Stearyl acrylate [4813-57-4] *U5d* MW 324.6 mp 28° bp 160°/3mm Tg 35° 75 ppm MEHQ TSCA $H_2C=CHCO_2(CH_2)_{17}CH_3$ Long-chain acrylate ester. Polymers are hydrocarbon-soluble. Mixture of C_{16} and C_{18} Total esters >90% 	02636-100	100 g
Stearyl methacrylate [32360-05-7] *HO4d* MW 338.6 bp 181°/15mm Tg 38° n_D^{20} 1.452 100 ppm HQ TSCA $H_2C=C(CH_3)CO_2(CH_2)_{17}CH_3$ Hydrophobic methacrylate ester. Polymers are hydrocarbon-soluble. Mixture of C_{16} and C_{18} total esters, >90%. 	02637-100	100 g
Styrene [100-42-5] *CHM6g* MW 104.5 bp 33–35°/8mm Tg 100° n_D^{20} 1.547 100–200 ppm MEHQ TSCA Widely used monomer which forms hard, hydrophobic polymers. 	00660-500	500 g
2-Sulfoethyl methacrylate, >90% [10595-80-9] *B4d* MW 194.1 n_D^{20} 1.477 d 1.3245 3000 ppm MEHQ TSCA Water-soluble monomer. Used to introduce polar sites into polymer chains, confer shear stability to aqueous polymer dispersions. 	02597-50	50 g
3-Sulfopropyl acrylate, potassium salt [31098-20-1] *H2g* MW 232.3 mp 302° (dec.) $H_2C=CHCO_2(CH_2)_3SO_3K$ Water-soluble monomer. Used to introduce polar sites into polymer chains, confer shear stability to aqueous polymer dispersions. 	17209-100	100 g
3-Sulfopropyl methacrylate, potassium salt, 98% [31098-21-1] *H5g* MW 246.3 mp 295° (dec.) $H_2C=C(CH_3)CO_2(CH_2)_3SO_3K$ Water-soluble monomer. Used to introduce polar sites into polymer chains, confer shear stability to aqueous polymer dispersions. 	17210-100	100 g
3-Sulfopropyldimethyl-3-methacrylamidopropylammonium, inner salt [5205-95-8] *U4g* (Dimethyl[3-methacrylamidopropyl]-3-sulfopropylammonium, inner salt) MW 292.4 mp 199 – 200° $H_2C=C(CH_3)CONHCH_2CH_2CH_2N(CH_3)_2(CH_2)_3SO_3$ Polar water-soluble monomer. Zwitterionic detergent and crosslinker. 	16570-5	5 g

	Catalog #	Size
T		
Tetraethylene glycol dimethacrylate [109-17-1] *HJO4d* MW 330.3 bp 220° n_D^{20} 1.463 75 ppm HQ TSCA Crosslinking monomer. 	02654-50	50 g
1H,1H,3H-Tetrafluoropropyl methacrylate [45102-52-1] *EHOV7d* MW 200.1 bp 69–72°/51mm n_D^{20} 1.373 100 ppm MEHQ $H_2C=C(CH_3)CO_2CH_2CF_2CHF_2$ Low refractive index monomer. 	07577-25	25 g
Tetrahydrofurfuryl acrylate [2399-48-6] *H5d* MW 156.2 bp 75.5°/2mm Tg -12° n_D^{20} 1.460 900 ppm MEHQ and 100 ppm HQ TSCA Cyclic ether derivative. 	02907-250	250 g
Triallyl cyanurate [101-37-1] *H5bg* MW 249.3 mp >110° bp 162°/2mm n_D^{20} 1.505 100 ppm HQ TSCA Crosslinking monomer. 	01236-100 01236-500	100 g 500 g
Tribromoneopentyl methacrylate *U7d* MW 392.9 Halogenated ester monomer for preparing flame-resistant polymers. 	03057-10	10 g
2,4,6-Tribromophenyl acrylate [3741-77-3] *U5d* MW 384.9 mp 77–78° TSCA For high refractive index (n ~1.60) polymers. 	03330-10	10 g
Trichloroacrylic acid [18901-22-9] *B7g* MW 175.4 mp 72° Halogenated acrylic acid derivative. 	02686-10	10 g

	Catalog #	Size
Tricyclodecane dimethanol diacrylate [42594-17-2] MW 304.38 n_D^{20} 1.506 d 1.10 g/mL at 25° C Clear liquid $C_{18}H_{24}O_4$ High refractive index monomer which exhibits low volume shrinkage in polymerization. Used in optical lens and optical fiber applications due to its high refractive index. Has also been used in dental composite applications for its low volume shrinkage. 	25110-50 25110-100	50 g 100 g
Triethylene glycol diacrylate [1680-21-3] *BHO4g* MW 258.3 mp 125°/2mm Tg 70° n_D^{20} 1.461 1170 ppm HQ TSCA Crosslinking monomer. Used in UV curing coatings. 	02655-250	250 g
Triethylene glycol dimethacrylate [109-16-0] *A2d* MW 286.2 bp 162°/1.2mm 80 ppm HQ TSCA $[H_2C=C(CH_3)CO_2CH_2CH_2OCH_2-]_2$ Crosslinking monomer. Used in UV curing coatings, soft contact lenses. *(Cat. #01319)* = min. 88%, *(Cat. #24034)* = min. 95% 	24034-100 01319-250	100 g 250 g
Triethylene glycol divinyl ether [765-12-8] *U4g* MW 202.3 bp 123°/18mm n_D^{20} 1.453 TSCA $H_2C=CH(OCH_2CH_2)_3OCH=CH_2$ Crosslinking monomer. Used in UV curing coatings. 	19560-100	100 g
Triethylene glycol monomethyl ether monomethacrylate [39670-09-2] *A2d* MW 246.3 bp >100°/1mm 100 ppm MEHQ TSCA Hydrophilic monomer. See poly(ethylene glycol) monomethyl ether monomethacrylate ester listings for longer chain length analogs. 	18556-500	500 g
2,2,2-Trifluoroethyl acrylate [407-47-6] *CH6d* MW 154.1 bp 91–92°/749mm Tg -10° n_D^{20} 1.350 100 ppm MEHQ TSCA $H_2C=CHCO_2CH_2CF_3$ For reduced refractive index (1.407) polymers. 	01718-25	25 g
2,2,2-Trifluoroethyl methacrylate [352-87-4] *CH4f* MW 168.1 bp 30°/40mm Tg 80° n_D^{20} 1.361 100 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2CH_2CF_3$ For reduced refractive index (1.437) polymers. 	02622-25	25 g

	Catalog #	Size
Bis-(2,2,2-Trifluoroethyl) Itaconate [104534-96-5] *HU4d* Bis-(Trifluoroethyl) Itaconate MW 294.15 bp 772–5° @ 80mm n_D^{20} 1.333 d 1.47 grams/mL Clear, colorless liquidTSCA $C_9H_8F_6O_4$ Fluoromonomer useful in producing polymers for the formulation of plastics with high performance and unique strength and durability. Fluoropolymers created from fluoromonomers are high value added materials with unique properties including chemical and heat resistance and the ability to withstand corrosion. Products made from fluoropolymers include surfactants, optical fibers, biomaterials, coatings for nonstick bakeware and membranes for fuel cells.	24972-25	25 g
Triglycidyl isocyanurate [2451-62-9] *HO6g* MW 297.3 mp 95° TSCA Effective crosslinker for hydroxyl; amine; and carboxylic acid-functional polymers.	16173-50	50 g
3,3,5-Trimethylcyclohexyl methacrylate [7779-31-9] *H4d* MW 210.1 bp 80–82°/2mm n_D^{20} 1.456 200 ppm MEHQ TSCA $H_2C=C(CH_3)CO_2C_6H_8(CH_3)_3$ Ester monomer having a bulky alkyl group.	02660-25 02660-500	25 g 500 g
1,1,1-Trimethylolpropane diallyl ether [682-09-7] *H7g* MW 214.3 bp 145°/25mm n_D^{20} 1.458 TSCA $C_2H_5C(CH_2OCH_2CH=CH_2)_2CH_2OH$ Crosslinking monomer.	05500-50	50 g
1,1,1-Trimethylolpropane monoallyl ether [682-11-1] *U7g* MW 174.4 mp <-10° bp 160°/25mm n_D^{20} 1.467 TSCA $H_2C=CHCH_2OCH_2C(C_2H_5)(CH_2OH)_2$ Hydrophilic monomer.	15914-50	50 g

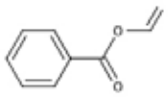
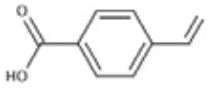
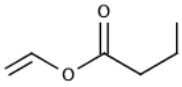
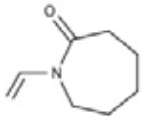
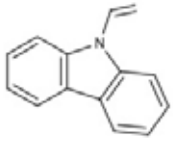
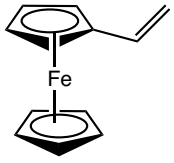
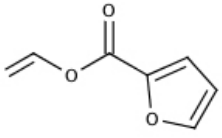
	Catalog #	Size
1,1,1-Trimethylolpropane triacrylate [15625-89-5] *H4g* MW 296.3 bp 316° n_D^{20} 1.474 100 ppm MEHQ and <20 ppm HQ TSCA $(H_2C=CHCO_2CH_2)_3CC_2H_5$ Crosslinking monomer.	02658-250	250 g
1,1,1-Trimethylolpropane trimethacrylate [3290-92-4] *HO2d* MW 338.4 bp 185°/5mm n_D^{20} 1.472 65 ppm HQ TSCA $[H_2C=C(CH_3)CO_2CH_2]_3CC_2H_5$ Crosslinking monomer.	02659-250	250 g

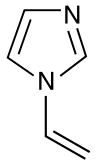
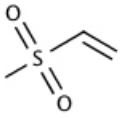
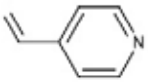
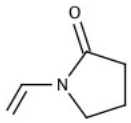
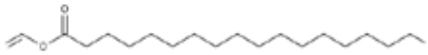
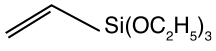
U

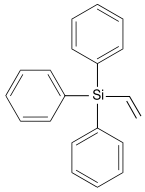
Undecyl methacrylate [16493-35-9] *HO6f* MW 240.4 TSCA Long-chain alkyl methacrylate ester. High boiling liquid.	02544-25	25 g

V

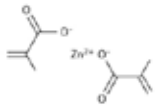
N-vinyl acetamide (NVA) [5202-78-8] *HK4g* MW 85.1 mp 54° C bp 96° C, (10 mm Hg) White solid TSCA Polymers produced from NVA offer a balance of hydrophilic and hydrophobic properties and find applications ranging from adhesives and thickeners to formulating aids to binders for inorganics. Specific Gravity: 1.05 @ 20° C	24806-50	50 g
Vinyl azlactone [29513-26-6] *EHU6f* MW 139.2 mp 6° C bp 52° C at 9mm Hg n_D^{20} 1.4575 Reactive heterocyclic monomer. Hydrolyzed to N-acryloyl-2-methylalanine.	21329-5	5 g

	Catalog #	Size
Vinyl benzoate [769-78-8] *HJ7d* MW 148.2 bp 72-76°/8mm n_D^{20} 1.529 20 ppm HQ Tg 75° $C_6H_5CO_2CH=CH_2$ Aromatic vinyl ester. 	02664-50 02664-100	50 g 100 g
4-Vinylbenzoic acid [1075-49-6] *HVWX6g* MW 148.2 mp 143 - 144° $H_2C=CHC_6H_4CO_2H$ Carboxylic acid styrene monomer. 	04485-5	5 g
Vinyl butyrate [123-20-6] *JU7dk* MW 114.1 bp 115 – 117° Tg -5° n_D^{20} 1.411 $H_2C=CHOCOCH_2CH_2CH_3$ Polymer has lower Tg than poly(vinyl acetate) and is more hydrophobic. 	02835-10	10 g
N-Vinylcaprolactam, min. 98% [2235-00-9] *HU4d* MW 139.2 mp 34.5 – 36.0° TSCA Capable of ring-opening polymerization as well as free radical polymerization. 	16818-10	10 g
N-Vinylcarbazole [1484-13-5] *HMO7g* MW 193.3 mp 65 – 67° n_D^{20} 1.6830 Polymers are photoconductive, especially in the form of complexes. Technical Data Sheet #263 	02429-25	25 g
Vinylferrocene [1271-51-8] *U5g* MW 212.1 mp 50 – 53° bp 80°/0.2mm Tg 187° Organometallic monomer. 	04503-1	1 g
Vinyl 2-furoate [1917-10-8] *U5d* MW 138.1 bp 182°/10mm Vinyl and Ethenyl Monomer. 	02829-10	10 g

	Catalog #	Size
1-Vinylimidazole [1072-63-5] *BE6g* MW 94.1 bp 78–79°/13mm n_D^{20} 1.530 TSCA Cationic monomer. 	01726-100	100 g
Vinyl methyl sulfone [3680-02-2] *HJWX7g* MW 106.4 bp 115°/19mm 1.463 Requires Poison Pack 0.02% p-t-butylphenol $H_2C{=}CHSO_2CH_3$ Water-soluble vinyl monomer. 	17206-5	5 g
Vinyl octadecyl ether [930-02-9] *U6g* MW 296.5 mp 27° bp 187°/5mm n_D^{20} 1.444 TSCA $CH_3(CH_2)_{17}OCH{=}CH_2$ Long-chain, hydrophobic vinyl ether. 	01728-100	100 g
4-Vinylpyridine [100-43-6] *BEVWX7f* MW 105.1 bp 62–65°/15mm n_D^{20} 1.550 100 ppm HQ Tg 142° TSCA Aromatic amine monomer. 	02668-100	100 g
N-Vinyl-2-pyrrolidone [88-12-0] *HM6d* (1-vinyl-2-pyrrolidinone) MW 111.1 mp 13–14° bp 90°/10mm n_D^{20} 1.512 Tg 175° Neutral hydrophilic monomer. Polymers are water-soluble. 95.5% redistilled, optical grade. APHA color Soluble in water. 	04000-250	250 g
Vinyl stearate, min. 95% [111-63-7] *U6g* MW 310.5 mp 34–36° 20 ppm MEHQ $CH_3(CH_2)_{16}CO_2CH{=}CH_2$ Hydrophobic long-chain vinyl ester. 	01784-100	100 g
Vinyltriethoxysilane [78-08-0] *BE6bg* MW 190.3 bp 157–159° n_D^{20} 1.398 TSCA $H_2C{=}CHSi(OC_2H_5)_3$ For introducing sites into polymers which adhere to silaceous surfaces. Moisture sensitive. 	04537-50	50 g

	Catalog #	Size
Vinyltriphenylsilane [18666-68-7] *H7g* MW 286.5 mp 68-70° TSCA $(C_6H_5)_3SiCH=CH_2$ Bulky silane monomer. 	21543-10	10 g

Z

Zinc (di)methacrylate [13189-00-9] *HO4bd* MW 237.6 mp >250 TSCA $[H_2C=C(CH_3)CO_2]_2Zn$ Can be used to introduce ionic crosslinks into polymers. 	03011-100	100 g

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Polysciences stocks a wide portfolio of polymers. This variety provides the formulation scientist a useful set of tools to design compositions with markedly different performance. These polymers can also be used by the synthetic scientist as platforms on which to build yet more complex polymer systems.

Polymer Selection Tables

Acid Functional Polymers & Salts

Acidic groups are often used to convey solubility to polymers in aqueous media. These versatile moieties can be converted to a wide range of alternative functional groups. Acid groups can be utilized as catalysts for chemical reactions. Additionally they are employed in polymers as the functional group which enables improved adhesion to a variety of substrates through hydrogen bonding or metal chelation.

Carboxylic Acids

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(acrylic acid)	~2,000	63% AQ		06513-250	250 g	281
	~5,000	50% AQ		06519-250	250 g	281
	~50,000	25% AQ		00627-250	250 g	281
	~345,000	25% AQ		03326-250	250 g	281
	~450,000	powder		03312-100	100 g	281
	~1,000,000	powder		06500-100	100 g	281
	~4,000,000	powder		06501-100	100 g	281
Poly(acrylic acid) ammonium salt	250,000	powder		03311-25	25 g	281
Poly(acrylic acid) sodium salt	~2,000	powder	water-soluble anionic polymer, low molecular weights used as pigment dispersants, high MW's used as flocculants	06568-250	250 g	281
	~3,000	40% AQ		18608-250	250 g	281
	~5,000	40% AQ		18609-250	250 g	281
	~6,000	powder		06567-250	250 g	281
	~60,000	35% AQ		18611-250	250 g	281
	~225,000	20% AQ		18613-250	250 g	281
Poly(butadiene/maleic acid) 1:1 (molar)	10K–15K	42% AQ	anionic polymer capable of anhydride or backbone unsaturation reaction	07787-500	500 g	283
Poly(n-butyl acrylate/acrylic acid) [50:50]		20% latex / alcohol		19911-10	10 g	284
Poly(ethyl acrylate/acrylic acid), [50:50]		20% in EtOH		19914-10	10 g	287
		powder		21056-5	5 g	287
Poly(ethylene/acrylic acid) [92:8]				06517-100	100 g	287
Poly(ethylene/maleic anhydride) 1:1 (molar)	400,000	powder	reacts with alcohols or amines	02308-50	50 g	293
Poly(maleic acid), 50% soln. in water	800–1,200	50% AQ		09732-10	10 g	300
Poly(methacrylic acid)	100,000	powder	water soluble polymer	00578-10	10 g	300
Poly(methacrylic acid) ammonium salt, 30% soln. in water	15,000	30% AQ	forms insoluble salts with polyamines	21169-25	25 g	300
Poly(methacrylic acid) sodium salt, 30 % soln. in water	15,000	30% AQ	forms insoluble salts with polyamines	21170-25	25 g	300
Poly(methyl methacrylate/ methacrylic acid)	100,000	powder		08207-50	50 g	301
	500,000	powder		19629-100	100 g	301
	1,200,000	powder		08208-100	100 g	301
		powder		08221-100	100 g	301
Poly(styrenesulfonic acid/ maleic acid), sodium salt	15,000	25% AQ	can be used as a pigment dispersant	11795-25	25 g	304
	20,000	powder	can be used as a pigment dispersant	18407-25	25 g	304
Poly(vinyl chloride/vinyl acetate/ maleic acid) [86:13:1]				18356-500	500 g	307

Phosphoric Acids

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(vinyl phosphoric acid), sodium salt	>200,000	powder	straight chain; 5% phosphorus	04391-5	5 g	308

Sulfonic Acids

	Mol. Weight	Form	Comments			
Poly(styrenesulfonic acid)	70,000	30% AQ	ionic polymer in acid form	08770-250	250 g	304
Poly(styrenesulfonic acid), sodium salt	75,000	powder	ionic polymer in salt form	08772-25	25 g	304
	1,000,000	powder		08773-25	25 g	304

Acrylate & Methacrylate Polymers

	Mol. Weight	Form	Comments			
Poly(benzyl methacrylate)				06562-10	10 g	282
Poly(iso-butyl acrylate)		20% soln. in toluene		07034-250	250 g	283
Poly(n-butyl acrylate)	10,000	20% soln. in toluene		03561-250	250 g	283
Poly(tert-butyl acrylate)		35% soln. in toluene		18240-25	25 g	284
Poly(iso-butyl methacrylate) fine powder, [η] = 0.60	200,000			02452-500	500 g	284
Poly(n-decyl acrylate)	130,000	20% soln. in toluene		07042-50	50 g	286
Poly(ethyl acrylate)	70,000			17342-2	2 g	287
Poly(glycidyl methacrylate), 10% soln. in MEK	25,000	10% soln. in MEK	reacts with carboxyls, hydroxyls or amines	06524-5	5 g	296
Poly(2-hydroxyethyl methacrylate/ methacrylic acid) [90:10]			water soluble in presence of alkali	08725-10	10 g	297
Poly(2-hydroxypropyl methacrylate)				09690-10	10 g	297
Poly(lauryl acrylate), 20% soln. in toluene		20% soln. in toluene		09697-25	25 g	299
Poly(lead methacrylate 2-ethylhexanoate/ methyl methacrylate) [83:17] (by wt.)				16399-25	25 g	299
Poly(methyl methacrylate)	25,000			04554-500	500 g	301
	75,000			04553-500	500 g	301
	100,000			17913-500	500 g	301
	500,000			04552-500	500 g	301
Poly(methyl methacrylate/ n-butyl methacrylate)				01922-500	500 g	301
Poly(octadecyl methacrylate)	170,000	~40% soln. in toluene		04321-100	100 g	302
Poly(iso-propyl methacrylate)				07052-10	10 g	303
Poly(tert-butyl methacrylate)				07037-25	25 g	304

Amides

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Polyacrylamide	10,000	50% AQ	nonionic water soluble polymer; high molecular weight polymers find application as flocculants	22581-250	250 g	280
	600K–1M	10% AQ		19901-250	250 g	280
Polyacrylamide	5,000,000	1% AQ		21485-250	250 g	280
	5M- 6M	powder		02806-250	250 g	280
	18,000,000	powder		18522-100	100 g	280
Poly(acrylamide/acrylic acid), Na Salt	200,000	powder		04652-250	250 g	280
	>10,000,000	powder		18545-250	250 g	280
	200,000	powder	anionic acrylamide polymer	02220-250	250 g	280
Polycaprolactam	18,000	powder	widely used in fibers	18180-250	250 g	284
	35,000	pellets		18179-250	250 g	284
Polyetherimide	30,000	powder	high softening point resin	16845-100	100 g	287
Poly(2-ethyl-2-oxazoline)	5,000	powder	neutral water soluble polymer, can be hydrolyzed to linear polyethylenimine	24066-50	50 g	295
	50,000	powder		17808-100	100 g	295
	200,000	powder		24882-100	100 g	295
	500,000	powder		17810-100	100 g	295
Poly(hexamethyleneadipamide)		powder	used in fibers. mp 265–270° C	06557-500	500 g	296
Poly(hexamethylenesebacamide)				06558-500	500 g	296
Polymethacrylamide		powder	water soluble polyamide	16144-10	10 g	300
Poly(N-iso-propylacrylamide)	40,000	powder	soluble at RT, insoluble above 40° C	21458-10	10 g	302
Starch, poly(acrylamide/acrylic acid) graft, acid sodium salt			water abosrbing, water holding resin	08215-100	100 g	309

Amine Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(4-vinylpyridine / divinylbenzene)		beads	can be used as adsorbant or ion exchange resin	06579-10	10 g	208
Chitin, practical		powder	acetylated amino glucose	00210-50	50 g	275
Chitosan	15,000		degree of deacetylation 84%	21161-50	50 g	275
	100K–300K	powder	amine 7–12%	00281-100	100 g	275
Poly(acrylamide/2-methacryloxyethyltri-methylammonium bromide) [80:20]	50,000		cationic polymer	21743-10	10 g	280
Poly(diallyldimethylammonium chloride)		28% AQ		19898-250	250 g	282
	240,000	powder	linear cationic cyclic polymer	17338-10	10 g	282
Poly(Allyl Amine)	15,000		water soluble cationic polymer	24826-100	100 g	281
New! Poly(allylamine hydrochloride)	120K - 200K	40% AQ	polymeric primary amine	25673-100	100 g	282
Poly(4-aminostyrene)	>150,000	powder	insol in org solvents and mineral acids	02823-1	1 g	282
Polyaniline, Emeraldine form	15,000	powder	acid doped, conductivity 2^{-4} S/cm	21288-5	5 g	282
	15,000	powder	undoped, conductivity 10^{-10} S/cm	24043-5	5 g	282
Polyaniline, water-soluble		powder	product of polyaniline with propanesultone	23614-1	1 g	282
Poly(butadiene/acrylonitrile), amine terminated				09753-100	100 g	283
Poly(3-chloro-2-hydroxypropyl-2-methac-ryloxyethyldimethylammonium chloride), 20% soln. in water		20% AQ	chlorohydroxypropyl group, can be cyclized to oxirane by mild alkali	21480-10	10 g	286
New! Poly(2-dimethylaminoethyl methacrylate), 28% soln. in toluene	200,000	liquid	water soluble cationic polymer	25996-10	10 g	286

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(ethylene glycol) bis (2-aminoethyl)	1,000	powder	can be used to conjugate proteins and drug substances for drug delivery	24285-1	1 g	288
	10,000	powder		24303-1	1 g	288
Poly(ethylene glycol) α-2-aminoethyl, μ-methoxy	2,000	solid	used for protein conjugation	24304-1	1 g	288
Polyethylenimine, branched	600	liquid	highly branched polyamine containing primary, secondary and tertiary amine groups	02371-500	500 g	294
	1,200	liquid		06088-100	100 g	294
	1,800	liquid		06089-100	100 g	294
	10,000	liquid		19850-100	100 g	294
	10,000	30% AQ		17938-100	100 g	294
	70,000	30% AQ		00618-100	100 g	294
	50K-100K	30% AQ		06090-100	100 g	294
Polyethylenimine, branched	750,000			25448-100	100 g	294
	750,000			25449-100	100 g	294
	750,000			25449-500	500 g	294
	2,000,000			25450-100	100 g	294
	2,000,000			25450-500	500 g	294
Polyethylenimine, Linear	25,000	powder		23966-2	2 g	294
Polyethyleneimine, Linear	~100,000			25414-2	2 g	294
Polyethylenimine, Linear	2,500	powder	polymer with all secondary amines	24313-2	2 g	294
	250,000	powder		24314-2	2 g	294
Polyethylenimine "Max", (MW 4,000*) High Potency Linear PEI	Nom. 4,000	solid	easy to handle, hydrochloride salt form	24885-2	2 g	295
Polyethylenimine "Max", (MW 40,000*) High Potency Linear PEI	Nom. 40,000	solid	easy to handle, hydrochloride salt form	24765-2	2 g	295
Polyethylenimine "Max", (MW 160,000*) High Potency Linear PEI	160,000	solid		25439-2	2 g	295
Polyethylenimine, branched, permethylated, permethobromide	6,300	10% AQ	high charge density, quaternary salt	21903-10	10 g	295
Poly(l-lysine hydrobromide)	40K–60K	powder		18619-50	50 mg	299
	80K–120K	0.1% AQ	cationic polymer, used for promotion of cell adhesion to surfaces	09730-25	25 ml	299
	100K–140K	powder		21430-100	100 mg	299
Poly(2-methacryloxyethyltrimethylammonium bromide),	200,000	20% AQ		21746-10	10 g	300
Poly(N-methylvinylamine)	500,000	powder	water soluble, all secondary polyamine	24038-5	5 g	302
Poly(vinylamine) hydrochloride	25,000	powder	water soluble, all primary polyamine salt	23965-1	1 g	306
Poly(2-vinyl-1-methylpyridinium bromide, 20% soln. in water	50,000	20% AQ	degree of quaternization ~50%	21477-10	10 g	307
Poly(2-vinylpyridine)	200K–400K	powder	adhesive-promoting properties	19238-10	10 g	308
	40,000	powder	water soluble at low pH	21382-10	10 g	308
	300K–400K	powder		17770-10	10 g	308
Poly(4-vinylpyridine)	50,000	powder	water soluble at low pH	00112-50	50 g	308
	150K–200K	powder		22176-50	50 g	308
Poly(2-vinylpyridine N-oxide)	300K–400K	powder	water soluble, cationic resin	01564-10	10 g	308
Poly(4-vinylpyridine N-oxide)	200,000	powder	water soluble, cationic resin	23684-10	10 g	308

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(N-vinylpyrrolidone)	2,500	powder	water-soluble polymer used as a thickener, protective colloid	16693-250	250 g	309
	4K–6K	powder		24737-250	250 g	309
	10,000	powder		03315-250	250 g	309
	40,000	powder		01051-250	250 g	309
	40,000	powder	pharmaceutical grade	01052-250	250 g	309
	1,000,000	powder		06067-250	250 g	309
Poly(N-vinylpyrrolidone/2-dimethylaminoethyl methacrylate), dimethyl sulfatequaternary	100,000	20% AQ	cationic quaternary salt	16294-100	100 g	309

Biodegradable Polymers

	Mol. Weight	Form	Comments			
Glycolide, 99.9%	116.1			17085-10	10 g	227-228
Guar Gum	1,200,000		natural water soluble polysaccharide	21255-100	100 g	278
New! Hydroxypropyl Cellulose		powder	[3–6 cP]	25727-100	100 g	278
		powder	[6–10 cP]	25728-100	100 g	279
		powder	[150–400 cP]	25729-100	100 g	279
		powder	[1,000–4,000 cP]	25730-100	100 g	279
New! Hypromellose		powder	Type 2208 [100 cP]	25731-100	100 g	279
		powder	Type 2208 [3,550 cP]	25732-100	100 g	279
		powder	Type 2208 [100,000 cP]	25733-100	100 g	279
		powder	Type 2910 [4,000 cP]	25735-100	100 g	279
		powder	Type 2910 [50 cP]	25734-100	100 g	279
Polycaprolactam	18,000		widely used in fibers	18180-250	250 g	284
	35,000	pellets		18179-250	250 g	284
Polycaprolactone	43K–50K	flakes	hydroxyl end group. mp 55–65° C	19561-500	500 g	284
Polycaprolactone diol	1,250	liquid	hydroxyl # 90mg /g of polymer	09706-500	500 g	284
	2,000	liquid	hydroxyl # 56mg /g of polymer	09694-500	500 g	284
Polycaprolactone, powdered	50,000	powder	hydroxyl end group. mp 58–60° C	25090-500	500 g	284
Poly(glycolic acid) [i.v. 1.0-2.0]	>100,000	powder	i.v. 1.0–2.00. decomposes in 6 months at 37° C at pH 9.0	06525-25	25 g	296
Poly[(R)-3-hydroxybutyrate]	~500			16930-1	1 g	296
	~1,000			16932-1	1 g	296
	~2,000			16934-1	1 g	296
	~3,000			16936-1	1 g	296
	~5,000			16938-1	1 g	296
	~10,000			16940-1	1 g	296
Poly[(-)3-hydroxybutyric acid]	500,000	powder	mp 168–176° C	16916-10	10 g	297

Poly(dl-lactide/glycolide) Polymers

	Mol. Weight	Form	Comments			
Poly(dl-lactide/glycolide)	<10,000	powder	i.v. 0.15–0.30	19076-5	5 g	298
	<10,000		i.v. 0.15–0.30	19077-5	5 g	298
	10,000	powder	i.v. 0.12–0.30	19247-5	5 g	298
	150,000	powder	i.v. 0.80–1.2	23987-5	5 g	298
	12K–16K	powder	i.v. 0.50–0.65	23986-5	5 g	298
	20,000	powder	i.v. 0.55–0.75	23989-5	5 g	298
	97,000		i.v. 0.55–0.75	25107-5	5 g	298
Poly(l-lactide/glycolide) [70:30]	<10,000	powder		16587-5	5 g	298
	10K–20K	powder		21864-5	5 g	298

Poly(dl-lactic acid) & Poly(l-lactic acid) Polymers

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(dl-lactic acid)	15,000	powder	i.v. 0.15–0.30	22505-10	10 g	297
	20K–30K	powder	i.v. 0.35–0.45	16585-10	10 g	297
	300K–600K	powder	i.v. 2.0–2.8dl/g	23976-10	10 g	297
Poly(l-lactic acid)	1,600–2,400	powder	i.v. 0.10–0.20	18580-10	10 g	298
	140K–160K	powder	i.v. 0.80–1.20	06529-1	1 g	298
	80K–100K	powder	i.v. 1.30–1.60	18402-10	10 g	298
	325K–460K	powder	i.v. 4.00–5.00	18582-10	10 g	298
	700,000	powder	i.v. >7.00	21512-10	10 g	298

Polycaprolactone & Polyethylene Glycol Diblock Polymers

	Form	Comments	Catalog #	Size	Page
PCL(1,000)-b-PEG(1,000)	solid	biodegradable, diblock copolymers	25010-1	1 g	285
PCL(1,000)-b-PEG(2,000)	solid		25011-1	1 g	285
PCL(1,000)-b-PEG(5,000)	solid		25012-1	1 g	285
PCL(5,000)-b-PEG(1,000)	solid		25022-1	1 g	285
PCL(5,000)-b-PEG(2,000)	solid		25023-1	1 g	285
PCL(5,000)-b-PEG(5,000)	solid		25024-1	1 g	285

Polycaprolactone & Polyethylene Glycol Triblock Polymers

	Form	Comments	Catalog #	Size	Page
PCL(1,000)-b-PEG(1,000)-b-PCL(1,000)	solid	biodegradable, triblock copolymers	25019-1	1 g	285
PCL(1,000)-b-PEG(2,000)-b-PCL(1,000)	solid		25020-1	1 g	285
PCL(1,000)-b-PEG(6,000)-b-PCL(1,000)	solid		25021-1	1 g	285
PCL(1,000)-b-PEG(10,000)-b-PCL(1,000)	solid		25013-1	1 g	285
PCL(5,000)-b-PEG(1,000)-b-PCL(5,000)	solid		25014-1	1 g	285
PCL(5,000)-b-PEG(2,000)-b-PCL(5,000)	solid		25015-1	1 g	285
PCL(5,000)-b-PEG(5,000)-b-PCL(5,000)	solid		25016-1	1 g	285
PCL(5,000)-b-PEG(10,000)-b-PCL(5,000)	solid		25025-1	1 g	285

Polylactic Acid & Polyethylene Glycol Diblock Polymers

	Form	Comments	Catalog #	Size	Page
PEG(350)-b-PLA(300)	liquid	biodegradable, diblock copolymers	24375-1	1 g	291
PEG(1000)-b-PLA(750)	visc. liquid		24378-1	1 g	291
PEG(1000)-b-PLA(5000)	solid		24381-1	1 g	291
PEG(5000)-b-PLA(1000)	solid		24386-1	1 g	291
PEG(5000)-b-PLA(5000)	solid		24389-1	1 g	291
PEG(5000)-b-PLA(10,000)	solid		25018-1	1 g	291
PEG(10,000)-b-PLA(5,000)	solid		25017-1	1 g	291

Polylactic Acid & Polyethylene Glycol Triblock Polymers

	Form	Comments	Catalog #	Size	Page
PLA(1000)-b-PEG(1000)-b-PLA(1000)	visc. liquid	biodegradable, triblock copolomers	24500-1	1 g	292
PLA(2000)-b-PEG(1000)-b-PLA(2000)	solid		24501-1	1 g	292
PLA(5000)-b-PEG(1000)-b-PLA(5000)	solid		24502-1	1 g	292
PLA(1000)-b-PEG(4000)-b-PLA(1000)	solid		24503-1	1 g	292
PLA(1000)-b-PEG(10,000)-b-PLA(1000)	solid		24509-1	1 g	292
PLA(5,000)-b-PEG(10,000)-b-PLA(5,000)	solid		25026-1	1 g	292
PLA(10,000)-b-PEG(10,000)-b-PLA(10,000)	solid		25027-1	1 g	292

Block Copolymers

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(dimethylsiloxane-b-ethylene oxide), methyl terminated	600	liquid	surfactant-like diblock copolymer	09780-100	100 g	287
	3,000			21870-100	100 g	287
Poly(ethylene oxide-b-propylene oxide)	1,100	liquid	water-soluble or water-dispersible polymers with surfactant properties, chains are hydroxyl terminated	16273-100	100 g	293
	2,900	liquid		16275-100	100 g	293
	3,400	liquid		16274-100	100 g	293
	8,750	waxy solid		16277-100	100 g	293
	13,300	waxy solid		16276-100	100 g	293
Polyethylene-co-vinyl acetate 70:30 (wt)	55,000			25356-25	25 g	293
	60,000			25357-25	25 g	293
	65,000			25358-25	25 g	293
	75,000			25359-25	25 g	293
Poly(styrene-b-isoprene-b-styrene)	19,000			18347-250	250 mg	303

Conductive Polymers

	Mol. Weight	Form	Comments			
Polyaniline, Emeraldine form	15,000	powder	acid doped, conductivity 2^{-4} S/cm	21288-5	5 g	282,512
	15,000	powder	undoped, conductivity 10^{-10} S/cm	24043-5	5 g	282
Polyaniline, water-soluble		powder	product of polyaniline with propanesultone	23614-1	1 g	282
Poly(3,4-ethylenedioxythiophene) / poly(styrenesulfonate), aqueous dispersion (PEDT/PSS)		liquid	conductive polymer	24215-100		288
Polypyrrole		powder	conductive polymer	21304-5	5 g	303
Poly(N-vinylcarbazole)	40,000	powder	photoconductive polymer	02428-50	50 g	306

Halogen-containing Polymers

	Mol. Weight	Form	Comments			
Dextran, hydrogenated	4K–6K		i.v. 0.055 terminal alcohol	16653-100	100 g	276
Fluorinated Ethylene Propylene Copolymer		fine powder	high release characteristics, 10–35 MFI	24778-100	100 g	278
		fine powder	high release characteristics, 35–70 MFI	24779-100	100 g	278
Halocarbon 200 Oil [Poly(chlorotrifluoroethylene)		liquid	200 centistokes	25073-100	100 ml	278
Halocarbon 400 Oil [Poly(chlorotrifluoroethylene)		liquid	400 centistokes	25074-100	100 ml	278
Halocarbon 700 Oil [Poly(chlorotrifluoroethylene)		liquid	700 centistokes	25075-100	100 ml	279
Halocarbon 1000N Oil [Poly(chlorotrifluoroethylene)		liquid	1,000 centistokes	25076-100	100 ml	279
Poly(4-bromostyrene)		powder	reactive bromine. ~43%	07030-1	1 g	282
Poly(2-chloro-1,3-butadiene)				21289-100	100 g	286
Poly(3-chloro-2-hydroxypropyl-2-methacryloxyethyldimethylammonium chloride), 20% soln. in water			chlorohydroxypropyl group can be cyclized to oxirane by mild alkali	21480-10	10 g	286
Poly(4-chlorostyrene)	250,000	powder		07041-5	5 g	286
Poly(chlorotrifluoroethylene)	500–600	oil	inert liquid of high temp baths	15176-100	100 g	286
Polyethylene, chlorinated, 25% Cl				01814-100	100 g	288

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(4-iodostyrene/styrene/divinylbenzene) ~58:40:2		powder	crosslinked styrene polymer with reactive iodine group	18148-5	5 g	297,414
Polystyrene, brominated		powder	66% brominated	21305-100	100 g	303
Poly(styrenesulfonyl fluoride)				16146-5	5 g	304
Poly(tetrafluoroethylene)		60% in H_2O	dispersion; 0.05–0.5 microns	21539-100	100 g	304
		powder	35 microns	08816-100	100 g	304,415
		powder	500 microns	01344-100	100 g	304
Poly(tetrafluoroethylene propylene) (PTFE)				04615-50	50 g	305
Poly(vinyl chloride)				09708-250	250 g	306
Poly(vinylidene chloride/acrylonitrile) [80:20]	150,000	powder	polymer with barrier properties	09747-100	100 g	306
Poly(vinylidene fluoride)		powder	inert polymer, often used as a coating	15190-100	100 g	306
		powder		15191-100	100 g	306
		powder		06094-100	100 g	306
		powder		18734-100	100 g	306
Poly(4-vinylphenol) brominated, 50% Br			softens at 210° C. flame retardant	09762-50	50 g	307

Liquid Crystal Polymers

Organic compounds capable of responding to small amounts of radiant energy and undergo a phase transition with selective reflection of light. Specific colors are obtained depending on the wavelength of light which is determined by the organic crystal array "pitch length." Application areas range from thermally activated displays to sensors, and detection devices to cosmetics.

	Form	Comments			
Cholesteryl Chloride	powder	cholesteric derivaties, liquid crystal polymers	24814-50	50 g	347
Cholesteryl Nonanoate	powder		24817-50	50 g	347
Cholesteryl Oleyl Carbonate	powder		24815-50	50 g	347
Cholesteryl Propionate	powder		24816-50	50 g	347
Poly(λ-benzyl l-glutamate)	powder		21444-1	1 g	347

Miscellaneous Polymers

Poly(vinyl methyl ether), 50% methanol solution	25505-100	100 g	307

Phenol-functional Polymers

	Mol. Weight	Form	Comments			
Poly(4-vinylphenol)	1,500–7,000	powder	reactive polyphenol	06527-10	10 g	307
	9,000–11,000	powder		18979-10	10 g	307
	22,000	powder		18980-10	10 g	307
Poly(4-vinylphenol)	9,000–11,000			25447-10	10 g	307

Photoactive Polymers

	Mol. Weight	Form	Comments			
Poly(vinyl alcohol), N-methyl-4(4'-formyl-styryl)pyridinium methosulfate acetal	~45,000	13.3% AQ	photocrosslinkable polymer, high dielectric constant, used in making silkscreen printing screens	22570-75	75 g	306
Poly(N-vinylcarbazole)	40,000	powder	photoconductive polymer	02428-50	50 g	306
Poly(vinyl cinnamate)		powder	photocrosslinkable polymer	02648-10	10 g	306

Poly(ethylene glycol) Polymers

	Mol. Weight	Comments	Catalog #	Size	Page
Poly(ethylene glycol)	200		01112-250	250 g	288
	300		01110-250	250 g	288
	400		01109-250	250 g	288
	600		00684-250	250 g	288
	1,000		00682-250	250 g	288
Poly(ethylene glycol)	1,450		00679-250	250 g	288
	3,400		06102-250	250 g	288
	7,500		06103-250	250 g	288
	10K-16K		22567-250	250 g	288
	2,000		25360-250	250 g	288
	20,000		22568-250	250 g	288
	1,450	pharmaceutical grade	01102-100	100 g	288
	8,000	pharmaceutical grade	17243-100	100 g	288
Poly(ethylene glycol) (200) adipate	530	reaction product for one mole (adipic acid) and two moles (PEG 200)	21509-100	100 g	288
Poly(ethylene glycol) bis (2-aminoethyl)	~1,000	can be used to conjugate proteins and drug substances for drug delivery	24285-1	1 g	288
	~10,000		24303-1	1 g	288
Poly(ethylene glycol) α-2-aminoethyl, ω-methoxy	2,000	used for protein conjugation	24304-1	1 g	289
Poly(ethylene glycol)-bisphenol A diglycidyl ether adduct	18,500		04686-250	250 g	289
Poly(ethylene glycol) (n) diacrylate	200		00669-250	250 g	242,289
	400		01871-250	250 g	242,289
	4,000		15246-1	1 g	242,289
Poly(ethylene glycol) (n) diglycidyl ether	200	crosslinker for amine-, hydroxyl- and carboxyl- functional polymers	08209-100	100 g	289
	400		08210-100	100 g	289
	600		08211-100	100 g	289
	1,000		24047-100	100 g	289
Poly(ethylene glycol) (n) dimethacrylate	200		00096-100	100 g	289
	400		15179-100	100 g	289
	1,000		15178-100	100 g	289
Poly(ethylene glycol) (n) dimethyl ether	~500		25405-25	25 g	289
	1,000		17032-25	25 g	289
	2,000		17033-25	25 g	289
Poly(ethylene glycol) (n) distearate	200		02298-100	100 g	290
	400		01048-100	100 g	290
	6,000		19234-100	100 g	290
Poly(ethylene glycol) (750) monocarboxymethyl ether monomethyl ether	750	carboxylic acid-terminated, can be coupled to molecules with carbodiimides	21483-500	500 mg	290
Poly(ethylene glycol) (n) monomethacrylate	200		16712-100	100 g	290
	400		16713-100	100 g	290
Poly(ethylene glycol) monomethyl ether	350	hydroxyl group at one end	04200-500	500 g	290
	550		04457-500	500 g	290
	750		00626-500	500 g	290
	1,900		04242-500	500 g	290
	5,000		05986-500	500 g	290
Poly(ethylene glycol) (n) monomethyl ether monomethacrylate	200		16664-100	100 g	242,290
	400		16665-100	100 g	242,290
	1000		16666-100	100 g	242,290

	Mol. Weight	Comments	Catalog #	Size	Page
Poly(ethylene glycol) (n) monomethyl ether, mono(succinimidyl succinate) ester	1,900		21482-500	500 mg	291
	5,000		18000-500	500 mg	291
Poly(ethylene glycol) (200) mono-stearate	200		03142-100	100 g	291
Poly(ethylene glycol terephthalate)	20K – 30K	used in films, fibers and drink bottles	04301-250	500 g	292

Reactive Polymers

Aldehyde and Ketone Functional Polymers

	Mol. Weight	Form	Comments			
Polyacrolein	200K–2M	powder	due to intermolecular acetals, acts as if heavily crosslinked	04287-10	10 g	280
Poly(vinyl methyl ketone)		powder	reactive carbonyl	04320-10	10 g	307

Carboxylic Acid Anhydride Functional Polymers

	Mol. Weight	Form	Comments			
Poly(butadiene/maleic anhydride) 1:1 (molar)	10K–15K	25% in acetone	can be reacted at anhydride or backbone olefin	07788-500	500 g	283
Poly(ethylene/maleic anhydride) 1:1 (molar)	400,000	powder	reacts with alcohols or amines	02308-50	50 g	293
Poly(maleic anhydride)	~10,000	powder	reacts with alcohols or amines	02348-5	5 g	300
Poly(maleic anhydride 1-octadecene) 1:1 (molar)	30K–50K	powder	reacts with alcohols or amines, hydrophobic	05152-100	100 g	300
Poly(styrene/maleic anhydride)	7,500		i.v. ~0.80	03497-500	500 g	304
	9,500		i.v. ~0.80	03498-500	500 g	304

Carboxylic Acid Chloride Functional Polymers

	Mol. Weight	Form	Comments			
Poly(acryloyl chloride), 25% soln. in dioxane	10,000	25% in dioxane	reacts with alcohols or amines	04293-10	10 g	281
Poly(methacryloyl chloride), 25% soln. in dioxane	~155K	25% in dioxane	reacts with alcohols or amines	04315-10	10 g	300

Hydroxyl-Functional Polymers

	Mol. Weight	Form	Comments			
Poly(1-glycerol methacrylate)		waxy solid	hydrophilic, water swellable polymer, probably crosslinked	16855-10	10 g	295-296
Poly(2-hydroxyethyl methacrylate)	200,000	powder		09689-25	25 g	297
	200,000	12% in Ethanol	water swellable	18894-100	100 ml	297

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(vinyl alcohol)	6,000	powder	80% hydrolyzed	22225-500	500 g	305
	25,000	powder	88% hydrolyzed	02975-500	500 g	305
	25,000	powder	98% hydrolyzed	04397-500	500 g	305
	78,000	powder	88% hydrolyzed	15132-500	500 g	305
	78,000	powder	98% hydrolyzed	15130-500	500 g	305
	78,000	powder	99.7% hydrolyzed	15129-500	500 g	305
	108,000	powder	99.7% hydrolyzed	04324-500	500 g	305
	125,000	powder	88% hydrolyzed	04398-500	500 g	305
	133,000	powder	99% hydrolyzed	02815-500	500 g	305

Nitrile Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(butadiene/acrylonitrile) 67:33	63K	solid	widely used nitrile rubber	06561-500	500 g	283

Oxirane Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(glycidyl methacrylate), 10% soln. in MEK	25,000	10% in MEK	reacts with carboxyls, hydroxyls or amines	06524-5	5 g	296

Styrenic Polymers

	Mol. Weight		Comments			
Poly(4-iodostyrene/styrene/divinylbenzene) ~58:40:2			crosslinked styrene polymer with reactive iodine group	18148-5	5 g	297,414
Poly(α-methylstyrene)	5,000			07630-500	500 g	301
Poly(4-methylstyrene/styrene) [90:10]	50K			19831-10	10 g	301
Polystyrene	300K	atactic pellets		00574-100	100 g	303
	800–5,000	atactic flakes	softening point 125°	23637-100	100 g	303
	50,000	atactic flakes	biomodal with MW ~50,000 & 1500 (50:50)	18544-100	100 g	303
Polystyrene, brominated			66% brominated	21305-100	100 g	303

Water Soluble Polymers

	Mol. Weight	Form	Comments			
Cellulose, ethyl ether	160K			02354-500	500 g	274
	160K			05429-500	500 g	274
Cellulose, ethyl hydroxyethyl ether				05431-100	100 g	274
Cellulose, hydroxyethyl ether	~90,000	powder	water-soluble cellulose ether, used as a binder and thickening agent	05570-500	500 g	275
	720,000	powder		05569-500	500 g	275
	1,000,000	powder		05568-500	500 g	275
Cellulose, methyl hydroxyethyl ether	110K	2% soln. in H_2O	cellulose derivative	21275-500	500 g	275
Chitosan	~15,000	powder	degree of deacetylation 84%	21161-50	50 g	275
	100K–300K	powder	amine 7-12%	00281-100	100 g	275
Dextran	15K–20K	powder	i.v. 0.10–0.14	01341-100	100 g	276
	100K–200K	powder	i.v. 0.343	05056-100	100 g	276
	200K–300K	powder	i.v. 0.4–0.5/37° C	22500-100	100 g	276
	3M–7M	powder		05059-100	100 g	276
Dextran, DEAE ether	500,000			15757-50	50 g	276
Dextran, hydrogenated	4K–6K	powder	i.v. 0.055 terminal alcohol	16653-100	100 g	276
Dextran sulfate, sodium salt	500,000	powder	sulfur 19%, anionic dextran derivative	00407-100	100 g	276

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Guar Gum	1,200,000	powder	natural water soluble polysaccharide	21255-100	100 g	278
Polyacrylamide	10,000	50% AQ	nonionic water soluble polymer; high molecular weight polymers find application as flocculants	22581-250	250 g	280
	600K–1M	10% AQ		19901-250	250 g	280
	5,000,000	1% AQ		21485-250	250 g	280
	5M–6M	powder		02806-250	250 g	280
	18,000,000	powder		18522-100	100 g	280
Poly(acrylamide/acrylic acid), Na Salt	200,000	powder		04652-250	250 g	280
	>10,000,000			18545-250	250 g	280
	200,000	powder	anionic acrylamide polymer	02220-250	250 g	280
Poly(acrylamide/acrylic acid), potassium salt, crosslinked		powder	active ingredient of low-bulk diapers, potassium salt	24620-250	250 g	280
Poly(acrylamide/2-methacryloxyethyltrimethylammonium bromide) [80:20]	50,000	20% AQ	cationic polymer	21743-10	10 g	280
Poly(acrylic acid)	2,000	63% AQ		06513-250	250 g	281
	5,000	50%AQ		06519-250	250 g	281
Poly(acrylic acid)	50,000	25% AQ		00627-250	250 g	281
	345,000	25% AQ		03326-250	250 g	281
	450,000	powder		03312-100	100 g	281
	1,000,000	powder		06500-100	100 g	281
	4,000,000	powder		06501-100	100 g	281
Poly(acrylic acid) ammonium salt	250,000	powder		03311-25	25 g	281
Poly(acrylic acid) sodium salt	~2,000	powder	water-soluble anionic polymer, low molecular weights used as pigment dispersants, high MW's used as flocculants	06568-250	250 g	281
	~3,000	40% AQ powder		18608-250	250 g	281
	~5,000	40% AQ		18609-250	250 g	281
	~6,000	powder		06567-250	250 g	281
	~60,000	35% AQ		18611-250	250 g	281
	~225,000	20% AQ		18613-250	250 g	281
Poly(acrylic acid), sodium salt, crosslinked				24619-250	250 g	281
Poly(diallyldimethylammonium chloride)	240,000	powder	linear cationic cyclic polymer	17338-10	10 g	282
Poly(Diallyl Dimethyl Ammonium Chloride)	8,500	28% solid in H2O	supplied as hydrochloride salts	24828-100	100 g	282
Poly(Allyl Amine)	15,000	15% solid in H2O	water soluble cationic polymer	24826-100	100 g	281
Poly(butadiene/maleic acid) 1:1 (molar)	10K–15K	42% AQ	anionic polymer capable of anhydride or backbone unsaturation reaction	07787-500	500 g	283
Poly(n-butyl acrylate/2-methacryloxyethyltrimethylammonium bromide) [80:20]		20% AQ	cationic polymer	21744-10	10 g	283
Poly(3-chloro-2-hydroxypropyl-2-methacryloxyethyldimethylammonium chloride), 20% soln. in water		20% AQ	chlorohydroxypropyl group can be cyclized to oxirane by mild alkali	21480-10	10 g	286
New! Poly(2-dimethylaminoethyl methacrylate), 28% soln. in toluene	200,000	liquid	water soluble cationic polymer	25996-10	10 g	286
Poly(ethyl acrylate/acrylic acid), [50:50]		20% in EtOH powder		19914-10	10 g	287
				21056-5	5 g	287
Poly(ethylene/acrylic acid) [92:8]	65K			06517-100	100 g	287
Poly(ethylene oxide)	5,000,000	waxy solid		04031-500	500 g	292

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(ethylene oxide)	100,000	waxy solid		06104-500	500 g	292
	200,000	waxy solid		17503-500	500 g	292
	300,000	waxy solid		06105-500	500 g	292
	600,000	waxy solid		06106-500	500 g	292
	1,000,000	waxy solid		21295-500	500 g	292
	4,000,000	waxy solid		04030-500	500 g	292
	8,000,000	waxy solid		21296-500	500 g	292
Poly(ethylene oxide-b-propylene oxide)	1,100	liquid	water-soluble or water-dispersible polymers with surfactant properties, chains are hydroxyl terminated	16273-100	100 g	293
	2,900	liquid		16275-100	100 g	293
Poly(ethylene oxide-b-propylene oxide)	3,400	liquid		16274-100	100 g	293
	8,750	waxy solid		16277-100	100 g	293
	13,300	waxy solid		16276-100	100 g	293
Poly(2-ethyl-2-oxazoline)	5,000	powder	neutral water soluble polymer, can be hydrolyzed to linear polyethylenimine	24066-50	50 g	295
	50,000	powder		17808-100	100 g	295
	200,000	powder		24882-100	100 g	295
	500,000	powder		17810-100	100 g	295
Poly(1-glycerol methacrylate)		waxy solid	hydrophilic, water swellable polymer, probably crosslinked	16855-10	10 g	295-296
Poly(2-hydroxyethyl methacrylate/ methacrylic acid) [90:10]		solid	water soluble in presence of alkali	08725-10	10 g	297
Poly(2-hydroxypropyl methacrylate)				09690-10	10 g	297
Poly(l-lysine hydrobromide)	40K–60K	powder		18619-50	50 mg	299
	80,000	0.1% AQ	cationic polymer, used for promotion of cell adhesion to surfaces	09730-25	25 ml	299
	120,000	powder		21430-100	100 mg	299
Poly(maleic acid), 50% soln. in water	800–1,200	50% AQ		09732-10	10 g	300
Polymethacrylamide	5,000	powder	water soluble polyamide	16144-10	10 g	300
Poly(methacrylic acid)	100,000	solid	water soluble polymer	00578-50	50 g	300
Poly(methacrylic acid) ammonium salt, 30% soln. in water	15,000	30% AQ	forms insoluble salts with polyamines	21169-25	25 g	300
Poly(methacrylic acid) sodium salt, 30 % soln. in water	15,000	30% AQ	forms insoluble salts with polyamines	21170-25	25 g	300
Poly(2-methacryloxyethyltrimethylammonium bromide)	200,000	20% AQ		21746-10	10 g	300
Poly(N-methyl N-vinyl acetamide) homopolymer		powder	may be converted to poly (N-methyl vinyl amine) by hydrolysis	24810-50	50 g	302
Poly(oxyethylene) sorbitan monolaurate (Tween 20®)	1,227.5	liquid	surfactant, Tween® 20	06110-100	100 g	61,302
Poly(N-iso-propylacrylamide)	40,000	solid	soluble at RT, insoluble above 40° C	21458-10	10 g	302
Polypropylene, Chromatographic Grade			chromatographic grade	04342-100	100 g	302,414
			atactic	23968-100	100 g	302
	220,000	flakes	isotactic	06536-100	100 g	302
Poly(styrenesulfonic acid)	70,000	30% AQ	ionic polymer in acid form	08770-250	250 g	304
Poly(styrenesulfonic acid), sodium salt	75,000	powder	ionic polymer in salt form	08772-25	25 g	304
	1,000,000	powder		08773-25	25 g	304
Poly(styrenesulfonic acid/maleic acid), sodium salt	15,000	25% AQ	can be used as a pigment dispersant	11795-25	25 g	304
	20,000	solid	can be used as a pigment dispersant	18407-25	25 g	304
Poly(N-vinyl acetamide) homopolymer), Crosslinked			moderately water soluble, stable	24807-50	50 g	305
Poly(N-vinyl acetamide)	~4,060,000	powder	moderately water soluble, stable	24808-50	50 g	308
Poly(vinyl acetate)	90,000			06069-500	500 g	305

	Mol. Weight	Form	Comments	Catalog #	Size	Page
Poly(vinyl acetate), 40% hydrolyzed	72,000		40% hydrolyzed	17561-25	25 g	305
Poly(vinyl alcohol)	6,000	powder	80% hydrolyzed	22225-500	500 g	305
	25,000	powder	88% hydrolyzed	02975-500	500 g	305
	25,000	powder	98% hydrolyzed	04397-500	500 g	305
	78,000	powder	88% hydrolyzed	15132-500	500 g	305
Poly(vinyl alcohol)	78,000	powder	98% hydrolyzed	15130-500	500 g	305
	78,000	powder	99.7% hydrolyzed	15129-500	500 g	305
	108,000	powder	99.7% hydrolyzed	04324-500	500 g	305
	125,000	powder	88% hydrolyzed	04398-500	500 g	305
	133,000	powder	99% hydrolyzed	02815-500	500 g	305
Poly(vinyl alcohol), N-methyl-4(4'-formyl-styryl)pyridinium methosulfate acetal	45,000	13.3% AQ	photocrosslinkable polymer, high dielectric constant, used in making silkscreen printing screens	22570-75	75 g	306
Poly(vinylamine) hydrochloride	25,000	powder	all primary amine	23965-1	1 g	306
Poly(vinyl methyl ether), 50% aqueous solution	~30,000	50% AQ		03032-500	500 g	307
Poly(2-vinyl-1-methylpyridinium bromide, 20% soln. in water	50,000	20% AQ	degree of quaternization ~50%	21477-10	10 g	307
Poly(vinylphosphonic acid), 30% Soln.	24,000	30% AQ	polydispersity ~1.24	24297-10	10 g	307
Poly(2-vinylpyridine)	200K–400K	powder	adhesive-promoting properties	19238-10	10 g	308
Poly(vinyl phosphoric acid), sodium salt	200,000	solid	straight chain; 5% phosphorus	04391-5	5 g	308
Poly(2-vinylpyridine)	40,000	powder	water soluble at low pH	21382-10	10 g	308
	300K–400K	powder		17770-10	10 g	308
Poly(4-vinylpyridine)	50,000	solid	water soluble at low pH	00112-50	50 g	308
	150K–200K	solid		22176-50	50 g	308
Poly(N-vinyl acetamide-co-sodium acrylate)		powder	moderately water soluble, stable	24809-50	50 g	308
Poly(2-vinylpyridine N-oxide)	300K–400K	powder	water soluble cationic resin	01564-10	10 g	308
Poly(4-vinylpyridine N-oxide)	200,000	powder	water soluble cationic resin	23684-10	10 g	308
Poly(N-vinylpyrrolidone)	2,500	powder	water-soluble polymer used as a thickener, protective colloid	16693-250	250 g	309
	4,000–6,000			24737-250	250 g	309
	10,000	powder		03315-250	250 g	309
	40,000	powder		01051-250	250 g	309
	40,000		pharmaceutical grade	01052-250	250 g	309
	1,000,000	powder		06067-250	250 g	309
Poly(N-vinylpyrrolidone/2-dimethyl-aminoethyl methacrylate), dimethyl sulfatequaternary	100,000	20% AQ	cationic quaternary salt	16294-100	100 g	309
Poly(N-vinylpyrrolidone/vinyl acetate), 50% soln. in isopropanol	25,000		hydrophilic neutral polymer	09718-100	100 g	309
	45,000			09717-100	100 g	309
	66,000			09716-100	100 g	309
Poly(vinylsulfonic acid) sodium salt,	4K–6K	25% AQ	anionic polymer	04392-100	100 g	309

NOTES

NOTES

	Catalog #	Size

B

Biodegradable Polymers Kit . . . . . 18401-1 1 kit

Useful for studies involving bio-erodable drug matrices, biodegradable sutures and implant materials, as well as for situations requiring polymers that can biodegrade when placed in the soil.

Kit Contains 5g each of the following:

- Poly(glycolic acid) [26202-08-4] MW 100,000 i.v 1.0–2.0 *(Cat. #06525)*
- Poly(dl-lactic acid) [26969-66-4] MW 20,000 i.v ~0.4 *(Cat. #16585)*
- Poly(l-lactide-co-glycolide) [30846-39-0] MW 5,000 i.v ~0.2 *(Cat. #16587)*
- Poly(l-lactic acid) [33135-50-1] MW 100,000 i.v ~1.5 *(Cat. #18402)*

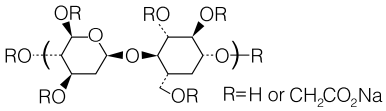
These products are offered for research purposes only, not for use in or on humans as a drug or device.

C

Cellulose, carboxymethyl ether, sodium salt [9004-32-4] *A5g*

n_D^{25} 1.3355 Degree of Substitution = 0.7 TSCA

Anionic water-soluble gum used as binder, thickener.



MW 80,000	Viscosity 2% AQ = Max 18 cps		06140-250	250 g
MW 250,000	Viscosity 1% AQ = 1000–2800 cps	pH 7.0	06138-250	250 g
MW 700,000	Viscosity 1% AQ = 1500–3000 cps	pH 6.5–8.5	06139-250	250 g

Cellulose, cyanoethyl ether [9004-41-5] *U2g* . . . . . 04687-10 10 g

MW 90,000–117,000 Tg 180° TSCA

R = CH_2CH_2CN

Solvent-soluble cellulose ether. High dielectric constant. Soluble in polar solvents, acetone, chloroform and pyridine.

Cellulose, ethyl ether [9004-57-3] *H4g*

n_D^{21} 1.3355 50 cps (5% soln. in 80:20 toluene/ethanol) Tg 43° TSCA

R= $-CH_2CH_3$

Solvent-soluble cellulose ether. Soluble in lower alcohols, MDC, esters, toluene.

Degree of Substitution = 2.21–2.28 powder	02354-500	500 g
Degree of Substitution = 2.41–2.51	05429-500	500 g

Cellulose, ethyl hydroxyethyl ether [9004-58-4] *A2g* . . . . . 05431-100 100 g

10 – 20 cps (measured as 5% soln. in 80:20 toluene/ethanol) TSCA

R = $-CH_2CH_3$ $HOCH_2CH_2-$

Extra low viscosity, powder. Solvent-soluble cellulose ether.

		Catalog #	Size
Cellulose, hydroxyethyl ether [9004-62-0] *H5g* powder TSCA R = $HOCH_2CH_2$- Water-soluble cellulose ether, used as a binder and thickening agent.			
~90,000	Viscosity 5% AQ = 75–150 cps	05570-500	500 g
~720,000	Viscosity 2% AQ = 4,500–6,500 cps	05569-500	500 g
~1,000,000	Viscosity 1% AQ = 1,500–2,500 cps	05568-500	500 g
Cellulose, methyl hydroxyethyl ether [9032-42-2] *A2g* 8,000 cps (2% soln. in H_2O) TSCA R = $(CH_2CH_2O)xH_1CH_3$ or H Water-soluble cellulose derivative.		21275-500	500 g
Chitin, practical [1398-61-4] *H5g* TSCA Chitin is a naturally derived acetylated amino glucose.		00210-50	50 g
Chitosan [9012-76-4] *A2g* TSCA Cationic polymer prepared by deacetylation of chitin. Soluble in water at low (4–6) pH. Soluble in water at low (4–6) pH; dilute organic and inorganic acids.			
Purified Powder MW ~15,000 Degree of deacetylation ~84%		21161-50	50 g
Practical [MW 100,000–300,000] Amine 7–12%		00281-100	100 g

Cyclic Olefin Copolymers (COC) [26007-43-2]
(Ethylene-Norbornene Copolymer)

Cyclic Olefin Copolymers are high transparency, low specific gravity, high heat resistant and have excellent optical properties and superior water vapor barrier characteristics. Combined with outstanding stiffness/strength and favorable sterilization properties, they have found applications ranging from FDA approvals for pharmaceutical and food applications to optical applications and electronics materials. Whether used by itself or as a modifier for other resins, the ethylene-norbornene copolymer offers the optical clarity of polymethylmethacryate (pMMA), the heat resistance of polycarbonate (PC) and superior dimensional stability.

Properties:

- High transparency
- Outstanding moisture barrier
- High rigidity and strength
- Variable heat distortion resistance up to 170° C
- Excellent biocompatibility
- Very good resistance to acids and alkalis and polar organic solvents
- Low density
- Very good electrical insulation properties
- Exceptionally low moisture absorption
- Low birefringence

HDT = Heat Deflection Temperature

HDT = 75° C	Tg 80° C	d 1.02	24750-100	100 g
HDT = 130° C	Tg 140° C	d 1.02	24749-100	100 g
HDT = 150° C	Tg 160° C	d 1.02	24748-100	100 g
HDT = 170° C	Tg 180° C	d 1.02	24746-100	100 g

	Catalog #	Size
β-Cyclodextrin [7585-39-9] *VWX5g* (cycloheptaamylose) MW 1,135 Cavity Diameter: 7–8 A° TSCA Host in host/guest complexes. Soluble in water, lower alcohols 99%.	00355-25	25 g

D

Dextran [9004-54-0] *A2g*
(poly[(1,6)-α-d-glucose]) TSCA $[C_6H_{10}O_5]_n$
Water soluble carbohydrate with many pharmaceutical and technical uses. Soluble in lower alcohols.

MW 15K–20K	i.v. 0.10–0.14	powder	01341-10	10 g
MW 15K–20K	i.v. 0.10–0.14	powder	01341-100	100 g
MW 100K–200K	i.v. 0.343	Nonpyrogenic, powder	05056-100	100 g
MW 200K–300K	i.v. 0.4–0.5/37° C	powder	22500-100	100 g
MW 3M–7M	Viscosity 1% AQ = 3.96 cps	powder	05059-100	100 g
MW 70K	Viscosity 0.24–0.29 dL/g water, lower alcohols (Meets USP Specifications)		25339-100	100 g
			25339-500	500 g

Dextran, DEAE ether [9015-73-0] *A2g*
(diethylaminoethyl ether) MW 500,000 Degree of substitution ~70%
$[-C_6H_9O_4[OCH_2CH_2N(CH_3)_2]]_n$
Cationic dextran derivative.
15757-50 — 50 g

Dextran, FITC [60842-46-8] *A2g*
(Fluorescein isothiocyanate) MW 150,000 Yellow-orange crystalline powder
Valuable materials for studying permeability and microcirculation in vivo. These are used to trace neuronal projections and active transport in live and unfixed tissue and as neuronal tracers in a variety of species.
J. Jonsson et al, 6th Europ. Conf. Microcirculation, Aalbong 1970, 214. Microvascular Res., 3, 440, (1971); Trends Nerosci, 13, 14 (1990); Proc. Natl. Acad. Sci. USA 92, 11500 (1995); Acla Neuropath. 59, 63, (1983). Cole, L., et al., J. Cell. Sci., v. 96, 721 (1990) [Internalisation of FITC and FITC-dextran by suspension cultured plant cells], Oliver, J.M., et al., Meths. Enzymol., v. 108, 336 (1984) [Study of fluid pinocytosis in leukocytes]
15759-500 — 500 mg

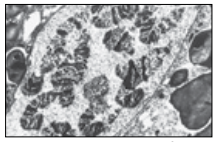
Dextran, hydrogenated *U2g*
MW 4,000–6,000 Viscosity i.v. 0.055
Properties are similar to dextran but aldehyde at chain ends is reduced to alcohol.
16653-100 — 100 g

Dextran sulfate, sodium salt [9011-18-1] *A2g*
MW 500,000 Viscosity 0.1–0.7 in 1M AQ NaCl Sulfur 19% pH of AQ 6.9 TSCA
$[-C_6H_9O_4(OSO_3N_a)]_n$
Anionic dextran derivative.
00407-100 — 100 g

E

Epoxy Resins

Araldite resins (modified epoxy resins)
TSCA
C_6H_4-1,2,-$[CO_2(CH_2)_3CH_3]_2$
Technical Data Sheet #128



Salivary Gland Cell from a Drosophila larva showing polytene chromosomes in the nucleus.

				Catalog #	Size
Grade 502	WPE 233–250	[84-74-2]	*HO5g*	00552-500	500 g
Grade 6005	WPE 182–189	[3101-60-8]	*HO7g*	02116-500	500 g

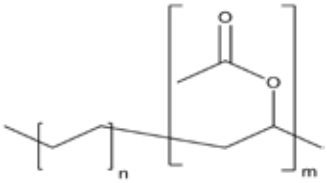
D.E.R. (Dow epoxy resins) [26142-30-3]
TSCA

Grade 732	WPE 310–330	MW ~600	Viscosity 55–100 cps *HO7g*	02922-450	450 g
Grade 736	WPE 175–205	MW ~300	Viscosity 30–60 cps *H2g*	02923-450	450 g

Epon® Resin 828 [25068-38-6] *HO2g* . . . . . 02334-500 500 g
(Bisphenol A diglycidyl ether) MW ~377 Viscosity 10,000–16,000 cps WPE: 185–192 TSCA
Standard epoxy resin used in formulation, fabrication and fusion technology. Widely used for embedding and potting. When cross-linked or hardened with appropriate amine curing agents, very good mechanical adhesive, dielectric and chemical resistance properties are obtained.

Epon® Resin 1001F [25036-25-3] *HO2g* . . . . . 24305-500 500 g
(Bisphenol A diglycidyl ether) MW 1075 Viscosity 7.0–9.6 cps WPE: 525–550
Higher MW epoxy resin cured by amine catalyst and used for embedding. Viscous liquid.

Ethylene Vinyl Acetate *H4g* . . . . . 24763-50 50 g
Tg -7° C (Soft, flexible polymer) Solids Content: 99 +/- 1%
White, free flowing powder Copolymer available as a free flowing powder that can easily be redispersed to form a latex dispersion. Powder is stablized with a vinyl alcohol to allow it to remain free flowing but easily redispersible in water.



Composition: Approximately 20 weight % ethylene and 80 weight % vinyl acetate.

Particle Size: 1–7 micron dominant sizes; max 4% over 40 mesh.

	Catalog #	Size

F

Fluorinated Ethylene Propylene Copolymer
mp (ASTM-D1457) 240 +/- 9° C Fine white powder
Fluorinated copolymers of ethylene and propylene improve overall performance when formulated into plastics, elastomeric polymers, paints and coatings or inks and lubricants.

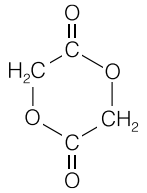
Advantages:
This product exhibits high release characteristics, excellent wear and mar resistance and slip resistance properties when used alone or in blends with other materials. The inherent toughness and high fluorine content imparts improved tear resistance, surface smoothness and flammability resistance in coating and ink formulations.

Properties:
- Service Temperature Range: (ASTM-D1457) -200° C – 260° C
- Mean Particle Size: 4 microns
- Polymer Specific Gravity: 2.2 – 2.3
- Bulk Density: 350 – 550 grams/liter

Melt Flow Index 10 – 35 MI	24778-100	100 g
Melt Flow Index 35 – 70 MI	24779-100	100 g

G

Glycolide, 99.9% [502-97-6] *B6bf*
MW 116.1 mp 84° TSCA
For preparation of biodegradable polymers.



Catalog #	Size
17085-10	10 g
17085-50	50 g

Guar Gum [9000-30-0] *A2g*
MW 1.2 million Viscosity 1% AQ ~6000 cps TSCA
Natural water-soluble polysaccharide.

Catalog #	Size
21255-100	100 g

H

Halocarbon 200 Oil [Poly(chlorotrifluoroethylene) [9002-83-9]
n_D^{20} 1.412 d 1.95 g/mL Viscosity at 100° F (37.8° C): 200 centistokes (390 cPs) Pour Point: 10° F (-12° C) Cloud Point: 35° F (2° C) Clear, colorless liquid
Inert, non-flammable lubricating oil. Polymer is a blend of oligomers. Also used as an inert medium in transgenic studies of fruit fly Drosophilia embryos.
E. Cornell et al, Review of Scientific Instruments, 79, 013705 (2008)

Catalog #	Size
25073-50	50 ml
25073-100	100 ml

Halocarbon 400 Oil [Poly(chlorotrifluoroethylene) [9002-83-9]
n_D^{20} 1.412 d 1.95 g/mL Viscosity at 100° F (37.8° C): 400 centistokes (780 cPs) Pour Point: 15° F (+/- 10); -9° C (+/- 5) Cloud Point: 50° F (10° C) Clear, colorless liquid
Inert, non-flammable lubricating oil. Polymer is a blend of oligomers. Also used as an inert medium in transgenic studies of fruit fly Drosophilia embryos.
E. Cornell et al, Review of Scientific Instruments, 79, 013705 (2008)

Catalog #	Size
25074-50	50 ml
25074-100	100 ml

	Catalog #	Size
Halocarbon 700 Oil [Poly(chlorotrifluoroethylene) [9002-83-9]	25075-50	50 ml
n_D^{20} 1.414 d 1.95 g/mL Viscosity at 100° F (37.8° C): 700 centistokes (1,365 cPs) Pour Point: 40° F (+/- 10); 5° C (+/- 5) Cloud Point: 55° F (13° C) Clear, colorless liquid	25075-100	100 ml
Inert, non-flammable lubricating oil. Polymer is a blend of oligomers. Also used as an inert medium in transgenic studies of fruit fly Drosophilia embryos.		
E. Cornell et al, Review of Scientific Instruments, 79, 013705 (2008)		
Halocarbon 1000N Oil [Poly(chlorotrifluoroethylene) [9002-83-9]	25076-50	50 ml
n_D^{20} 1.415 d 1.95 g/mL Viscosity at 100° F (37.8° C): 1,000 centistokes (1,950 cPs) Pour Point: 50° F (+/- 10); 10° C (+/- 5) Clear, colorless liquid	25076-100	100 ml
Inert, non-flammable lubricating oil. Polymer is a blend of oligomers. Also used as an ultraviscous solvent for ^{1}H NMR spectroscopy to better identify individual components in a complex mixture. The ultraviscous polymer solvent (mixed as 80% Halocarbon / 20% $CDCl_3$) greatly reduces the molecular tumbling of small molecules, thereby making the nuclear Overhauser effect (NOE) very large and of negative sign. In a NOESY experiment, the spectrum of the target molecule can be cleanly extracted from the mixture.		
Simpson, A. J., et al, Analytical Chemistry, Vol. 80, No. 1, January 1, 2008, pg 186-194		
New! Hydroxypropyl Cellulose *A4g*		
hydroxypropyl ether white to pale yellow powder		
HPC is a hydrophilic polymer used for drug encapsulants, opthalmic lubricants and transdermal patches. Also used as a general thickener. Viscosity measured as a 2% solution in water at 20° C.		
[3–6 cP]	25727-100	100 g
	25727-250	250 g
[6–10 cP]	25728-100	100 g
	25728-250	250 g
[150–400 cP]	25729-100	100 g
	25729-250	250 g
[1,000–4,000 cP]	25730-100	100 g
	25730-250	250 g
New! Hypromellose *H4g*		
Hydroxypropyl methylcellulose (Hypromellose), is a propylene glycol ether of methylcellulose. It is water soluble, and useful as an emulsifier, thickening agent, ophthalmic lubricant, excipient, coating and food additive.		
Type 2208 refers to a methoxy concentration of 19–24% and a hydroxypropoxy concentration of 4 to 12%. Type 2910 refers to a methoxy concentration of 28–30% and a hydroxypropoxy concentration of 7-12%.		
Type 2208 [100 cP]	25731-100	100 g
	25731-250	250 g
Type 2208 [3,550 cP]	25732-100	100 g
	25732-250	250 g
Type 2208 [100,000 cP]	25733-100	100 g
	25733-250	250 g
Type 2910 [50 cP]	25734-100	100 g
Type 2910 [4,000 cP]	25735-100	100 g
	25735-250	250 g

P

	Catalog #	Size
Polyacetal resin [9002-81-7] *A2g* (polyformaldehyde) MW ~41,000 mp 175° d 1.47 TSCA	02562-500	500 g
Polyacrolein [25068-14-8] *A2g* MW 200,000–2 million by viscosity TSCA Reactive polymer. Insoluble as supplied because of extensive inter- and intramolecular acetal linkages. Polyacrolein can be solubilized by reaction with reagents such as sodium bisulfite, hydrazine, etc. Insoluble in most of the organic solvents.	04287-10	10 g

Polyacrylamide [9003-05-8]
d 1.302 for AQ Solution Tg 165° TSCA
$[-CH_2CH(CONH_2)-]_n$
Important nonionic water-soluble polymer. High MW polymer is used primarily as a flocculant. Unit weights are weights of solution. Tg of high MW (>100,000) polymers = 165°. Unit weights are weights of solution. Soluble in water, morpholine.

MW 10K	(25g polymer)	50% soln. in water	Viscosity of 15% AQ 5.5 - 9 cps	*H4g*	22581-50	50 g
MW 10K	(50g polymer)	50% soln. in water	Viscosity of 15% AQ 5.5 - 9 cps	*H4g*	22581-100	100 g
MW 600K – 1M	(25g polymer)	10% soln. in water	Viscosity of 15% AQ 5.5 - 9 cps	*M6g*	19901-250	250 g
					19901-1	1 kg
MW 5M	(2.5g polymer)	1% soln. in water	Viscosity of 0.1% AQ 3.8 cps	*A2g*	21485-250	250 g
MW 5M - 6M	powder		Viscosity of 0.1% AQ 2.2 - 2.7 cps	*A2d*	02806-250	250 g
MW 18M	powder		Viscosity of 0.2% AQ 1200 cps	*A2d*	18522-100	100 g

Poly(acrylamide/acrylic acid), Na Salt [25085-02-3]
TSCA
Residual monomer. <.03% anionic acrylamide polymer

90:10	MW 200,000	Viscosity 10% AQ 150–170 cps	*H2g*	04652-250	250 g
60:40	MW >10,000,000		*H4g*	18545-250	250 g
30:70	MW 200,000 powder	Viscosity 10% AQ 300–800 cps pH of 1% AQ 9.5	*H5g*	02220-250	250 g

Poly(acrylamide/acrylic acid), potassium salt, crosslinked [31212-13-2] *A2g* Granular "super-absorbant" polymer powder, absorbs many times its weight of water. Active ingredient of low-bulk diapers.	24620-250	250 g
Poly(acrylamide/2-methacryloxyethyltrimethylammonium bromide) [80:20] [35429-19-7] *A2g* (2g polymer) MW 50,000 TSCA Cationic acrylamide polymer. Soluble in water.	21743-10	10 g

Poly(acrylic acid) [9003-01-4]
n_D^{25} 1.527 Tg of High MW (>100,000) polymers = 106° TSCA
$[-CH_2CH(CO_2H)-]_n$
Important anionic water soluble polymer. Can be crosslinked covalently or ionically to form hydrogels.

					Catalog #	Size
MW ~2K	Viscosity 400–1400 63% AQ	(157.5g polymer)	Mw/Mn 2.4	*H3g*	06513-250	250 g
MW ~5,000	50% soln. in water	(125g polymer)		*H2g*	06519-250	250 g
MW ~30K	30% AQ	mp -4° C		*H4g*	24771-250	250 g
MW ~50K	Viscosity 25% AQ	(62.5g polymer)	Mw/Mn 2.9	*H4g*	00627-250	250 g
MW ~345K	Viscosity 400–1200 cps 25% AQ	(62.5g polymer)	Mw/Mn 6.2	*A2g*	03326-250	250 g
MW ~450K	Viscosity 4 wt% AQ 700 cps	powder		*H4g*	03312-100	100 g
MW ~1M	Viscosity 4% AQ 4K–11K cps	powder		*H4g*	06500-100	100 g
MW ~4M	Viscosity 0.5 wt% AQ 40K–60K cps	powder		*H4g*	06501-100	100 g

Poly(acrylic acid) ammonium salt [28214-57-5] *HK4bcg* . . . . . 03311-25 25 g
MW 250,000 TSCA
Water-soluble anionic polymer. Ammonia is slowly lost from dry polymer.

Poly(acrylic acid) sodium salt [9003-04-7] *A2g*
TSCA $[-CH_2CH(CO_2Na)-]_n$
Water-soluble anionic polymer. Used at low molecular weights as pigment dispersant and at higher molecular weights as a flocculant. Polymer can form complexes with poly(ethylene oxide) and with nucleotides.

				Catalog #	Size
MW ~2K	Viscosity of 25% AQ 320 cps	Mw/Mn 2.15	powder	06568-250	250 g
MW ~3K	40% AQ (100g polymer)	Mw/Mn 1.5		18608-250	250 g
MW ~5K	40% AQ (100g polymer)	Mw/Mn <2		18609-250	250 g
MW ~6K	powder	Mw/Mn 2.4		06567-250	250 g
MW ~60K	35% AQ (87.5g polymer)			18611-250	250 g
MW ~225K	20% AQ (50g polymer)	Mw/Mn 6.1		18613-250	250 g

Poly(acrylic acid), sodium salt, crosslinked [09003-04-7] *A2g* . . . . . 24619-250 250 g
Granular "super-absorbant" polymer powder, absorbs many times its weight of water.
Active ingredient of low-bulk diapers.

Poly(acryloyl chloride), 25% soln. in dioxane [25189-84-8] *CHM6d* . . . . . 04293-10 10 g
MW ~10,000
Reactive polymer.

Poly(l-alanine) [25191-17-7] *A2g* . . . . . 17028-100 100 mg
MW 3,000–4,000
Low Molecular weight polypeptide useful for controlled release of bioactive substances.
Soluble in water, methanol, alkaline water.

Poly(allyl Amine) [30551-89-4] *B4d* . . . . . 24826-100 100 g
MW 15,000
Water soluble cationic polymer with primary amino groups (free base types) for chemical reactions. 15% solid in H_2O.

	Catalog #	Size
New! Poly(allylamine hydrochloride) [71550-12-4] *U5g* MW 120,000–200,000 TSCA $[-CH_2CH(CH_2NH_2xHCl)-]_n$ Polymeric primary amine. 40% AQ solution.	25673-100	100 g
Poly(diallyldimethylammonium chloride) [26062-79-3] MW 240,000 Polydispersity 2–3 TSCA Linear, cationic, aliphatic, quaternary ammonium cyclopolymer. Soluble in H_2O, MeOH, possibly other polar solvents.		
d 1.032 dry powder *KU5g*	17338-10	10 g
d 1.072 28% AQ (70g polymer) Viscosity ~1000 cps; pH (as is) 25° C ~2 *A2g*	19898-250	250 g
Poly(diallyldimethylammoniumchloride) [26062-79-3] *H4g* MW 8,500 Copolymer based on diallyl amine which generates a variety of cyclic tertiary amine structures. Supplied as ammonium salts. 28% solids in water.	24828-100	100 g
Poly(4-aminostyrene) [25086-42-4] *A2g* MW > 150,000 Polymeric aromatic primary amine. Prone to oxidative crosslinking. Insoluble in: organic solvents and mineral acids. Nitrogen content ~11%	02823-1	1 g
Polyaniline, Emeraldine form *A2g* MW ~15,000 d 1.36 Powder Conductive polymer.		
[25233-30-1] Acid doped Conductivity 2^{-4} S/cm Soluble in: sulfonic acid, ME SO_3H	21288-5	5 g
[5612-44-2] Undoped Conductivity 10^{-10} S/cm Soluble in: ME SO_3H, DMF, NMP	24043-5	5 g
Polyaniline, water-soluble *U2g* Reaction product of polyaniline, emeraldine form, with propanesultone.	23614-1	1 g
Poly(λ-benzyl l-glutamate) [25014-27-1] *A2d* MW 30,000–70,000 Tg 15° Liquid crystal polymer. Soluble in dichloroacetic acid.	21444-500 21444-1	500 mg 1 g
Poly(benzyl methacrylate) [25085-83-0] *A2g* n^{20}_D 1.568 Tg 54° $[-CH_2C(CH_3)(CO_2CH_2C_6H_5)-]_n$ Aromatic methacrylate ester polymer.	06562-10	10 g
Poly(4-bromostyrene) [24936-50-3] *U4g* n^{20}_D 1.594 d 1.408 Tg 11° $[-CH_2CH(C_6H_4Br)-]_n$ Polystyrene with reactive bromine substituent.	07030-1	1 g

				Catalog #	Size
Polybutadiene [9003-17-2] *A2g* d .89 TSCA [-$CH_2CH=CHCH_2$-] Liquid polyene that can be cured with sulfur or peroxides. Soluble in hydrocarbons, chloroform, THF.					
MW 1,600	n_D^{20} 1.515	liquid, vinyl-1,2 = 80%	Viscosity 40K±10K cps @ 45° C	22395-100	100 g
MW 3,000	n_D^{20} 1.500	liquid, vinyl-1,2 = 80%	Viscosity 65K cps @ 45° C	06081-100	100 g
MW 200,000	n_D^{20} 1.518	36% cis, 55% trans and 9% vinyl-1,2		19808-10	10 g
Polybutadiene, hydroxyl terminated *H2g* MW 3,000 Viscosity 20 cps @ 25°C Polydispersity = 1.35 Liquid TSCA HO(-$CH_2CH=CHCH_2$-)$_n$OH Functionalized polydienes which can be used in preparation of block copolymers, polymers with other groups. Hydroxyl value 0.64 meq/g 1,2-vinyl content 65 wt%, 1,4-cis content 12.5 wt% 1,4 trans content 22.5 wt%.				24857-100	100 g
Poly(butadiene/acrylonitrile) 67:33 [9003-18-3] *A3g* n_D^{20} 1.520 d 0.99 TSCA [-$CH_2CH(CN)$-]$_x$(-$CH_2CH=CHCH_2$-)$_y$ Widely used nitrile rubber. Soluble in THF, chloroform, toluene.				06561-500	500 g
Poly(butadiene/acrylonitrile), amine terminated *HU5g* Viscosity 200,000 cps @ 27° C butadiene ~83% acrylonitrile ~17% Mn = 5,500 Amine eq = 0.71 Functionalized poly(butadiene/acrylonitrile) which can be used in preparation of block copolymers, polymers with other end groups.				09753-100	100 g
Poly(butadiene/maleic acid) 1:1 (molar) [28265-35-2] *H2g* (210g Polymer) MW 10,000–15,000 Viscosity 2500 cps (42% soln. in water) Tg 57° TSCA Anionic, water-soluble, polymer capable of reaction through acid groups or backbone unsaturation.				07787-500	500 g
Poly(butadiene/maleic anhydride) 1:1 (molar) [25655-35-0] *CHWX5g* (125g Polymer) MW 10,000–15,000 Viscosity 12 cps (25% soln. in acetone) Tg 70° TSCA Reactive polymer capable of reacting at anhydride or backbone unsaturation.				07788-500	500 g
Poly(1,4-butanediol adipate) [25103-87-1] *A4g* MW 12,000 d 1.019 g/cc Tg -68°C TSCA H[-O(CH_2)$_4$$O_2$C($CH_2$)$_4$CO-]$_n$$CH_2CH_2CH_2CH_2$OH Aliphatic polyester resin. Soluble in chloroform, THF.				16269-10	10 g
Poly(n-butyl acrylate/2-methacryloxyethyltrimethylammonium bromide) [80:20] [56727-55-0] *A2g* (2g Polymer) Hydrophobic cationic polymer. Soluble in 20% in water.				21744-10	10 g
Poly(iso-butyl acrylate) [26335-74-0] *CH6g* (50g Polymer) mp 81° Tg -24° Tacky, hydrocarbon-soluble polymer.				07034-250	250 g
Poly(n-butyl acrylate) [9003-49-0] *CH6g* (50g Polymer) MW ~10,000 Tg -64° TSCA [-$CH_2CH[CO_2(CH_2)_3CH_3]$-]$_n$ Tacky, hydrocarbon-soluble, low Tg polymer.				03561-250	250 g

	Catalog #	Size
Poly(tert-butyl acrylate) [25232-27-3] *CHX7g* mp 200° Tg 43° TSCA (8.75g polymer) Soluble in Hydrocarbon.	18240-25	25 g
Poly(n-butyl acrylate/acrylic acid) [50:50] [25119-83-9] *CH5g* TSCA Carboxyl-functional hydrophobic polymer. 20% latex in alcohol (2g polymer) Soluble in alkali.	19911-10	10 g
Poly(iso-butyl methacrylate) fine powder, [η] = 0.60 [9011-15-8] *A2g* MW 200,000 n_D^{20} 1.477 d 1.045 Tg 53° TSCA $(-CH_2C(CH_3)[CO_2CH_2CH(CH_3)_2]-)_n$ Firm, water-insensitive, polymer.	02452-500	500 g
Poly(n-butyl methacrylate) [9003-63-8] MW ~180,000 n_D^{20} 1.483 d 1.06 TSCA $[-CH_2C(CH_3)[CO_2(CH_2)_3CH_3]-]_n$ Firm, water-insensitive, polymer. Soluble in acetone, chloroform, IPA, MEK, THF, toluene.		
Fine powder, [η] = 0.50 Tg 20° *A2g*	02061-100	100 g
40% Solution in mineral spirits *EH7g*	19900-250	250 g
Polycaprolactam [25038-54-4] *A2g* (Nylon 6) mp 215–250° n_D^{20} 1.530 TSCA Widely used in fibers.		
MW ~18,000	18180-250	250 g
MW 35,000 4.1 rel. visc.	18179-250	250 g
Polycaprolactone [24980-41-4] MW 43,000 – 50,000 mp 55–65° C ~3mm pellets TSCA $[-O(CH_2)_5CO-]_n$ Biodegradable polymer, hydroxyl end group.	19561-100 19561-500	100 g 500 g
Polycaprolactone diol [36890-68-3] *H4g* d 1.07 TSCA $H[-O(CH_2)_5CO-]_nOCH_2CH_2OCH_2CH_2O[-CO(CH_2)_5O-]_nH$ Biodegradable polymer. Can be used to make block copolymers.		
MW 1,250 mp 45° C liquid Viscosity 65–100 cps @ 55° C	09706-500 09706-2.5	500 g 2.5 kg
MW 2,000 mp 50° C liquid Viscosity 530–730 cps @ 55° C	09694-500	500 g
Polycaprolactone, powdered [24980-41-4] *H4g* MW 50,000 mp 58–60° C TSCA $[-O(CH_2)_5CO-]_n$ Biodegradable polymer, hydroxyl end group.	25090-500 25090-100	500 g 100 g

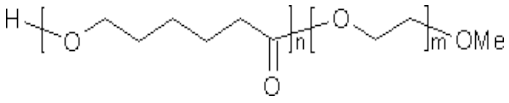
Poly(ε-caprolactone)-block-poly(ethylene glycol) *AK2bf*

Among the leading candidates for biodegradation are caprolactone based materials due to their approved uses by the FDA for drug delivery systems, sutures, long term implants and adhesion barriers as well as new tissue scaffold host systems.

Caprolactone is a biodegradable polyester with a relatively low melting point (60° C) but a glass transition temperature (Tg) around -60° C. The high crystallinity in the polyester accounts for this property balance. It is made by metal catalyzed ring opening polymerization of epsilon caprolactone. A typical molecular weight of standard polycaprolactone homopolymer is 188k Daltons. By comparison, a 100% polylactic acid homopolymer with Mw 330k Daltons has a (Tg) temperature of +55° C and a melting temperature Tm of about 175° C.

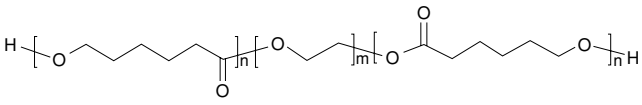
Further modifications of polycaprolactone are possible by converting it into diblock (A-B) or triblock (A-B-A) copolymers with polyethylene glycol. Synthetic methods which lead to block structures allow the polymer to have controlled biodegradation rates as well as improved physiological compatibility characteristics. Additional custom synthesis materials are available upon request. Please contact us for a quotation for your custom synthesis needs. For Poly(ethylene glycol) / Poly(lactic acid) Diblock & Triblock Polymers, see page 291.

Numbers in parenthesis refer to the MW of the segment



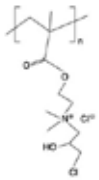
Diblock Polymers

	Catalog #	Size
PCL(1,000)-b-PEG(1,000)	25010-0.5	0.5 g
	25010-1	1 g
PCL(1,000)-b-PEG(2,000)	25011-0.5	0.5 g
	25011-1	1 g
PCL(1,000)-b-PEG(5,000)	25012-0.5	0.5 g
	25012-1	1 g
PCL(5,000)-b-PEG(1,000)	25022-0.5	0.5 g
	25022-1	1 g
PCL(5,000)-b-PEG(2,000)	25023-0.5	0.5 g
	25023-1	1 g
PCL(5,000)-b-PEG(5,000)	25024-0.5	0.5 g
	25024-1	1 g



Triblock Polymers *AK2bf*

PCL(1,000)-b-PEG(1,000)-b-PCL(1,000)	25019-1	1 g
	25019-0.5	0.5 g
PCL(1,000)-b-PEG(2,000)-b-PCL(1,000)	25020-1	1 g
	25020-0.5	0.5 g
PCL(1,000)-b-PEG(6,000)-b-PCL(1,000)	25021-1	1 g
	25021-0.5	0.5 g
PCL(1,000)-b-PEG(10,000)-b-PCL(1,000)	25013-0.5	0.5 g
	25013-1	1 g
PCL(5,000)-b-PEG(1,000)-b-PCL(5,000)	25014-1	1 g
	25014-0.5	0.5 g
PCL(5,000)-b-PEG(2,000)-b-PCL(5,000)	25015-1	1 g
	25015-0.5	0.5 g
PCL(5,000)-b-PEG(5,000)-b-PCL(5,000)	25016-1	1 g
	25016-0.5	0.5 g
PCL(5,000)-b-PEG(10,000)-b-PCL(5,000)	25025-1	1 g
	25025-0.5	0.5 g

	Catalog #	Size
Poly(2-chloro-1,3-butadiene) [9010-98-4] *A2g* (Neoprene®) d 1.23 Viscosity 34–41 @ 100° C Tg -48° TSCA $[-CH_2CH=C(Cl)CH_2-]_n$ Widely used rubber for applications requiring good solvent resistance.	21289-100	100 g
Poly(3-chloro-2-hydroxypropyl-2-methacryloxyethyldimethylammonium chloride), 20% soln. in water [76123-64-3] *U7g* (2g Polymer) Reactive quaternary ammonium polymer. Chlorohydroxypropyl group can be cyclized to oxirane by mild alkali. 	21480-10	10 g
Poly(4-chlorostyrene) [24991-47-7] *A2g* MW 250,000 Tg 110° $[-CH_2CH(C_6H_4Cl)-]_n$ Substituted polystyrene, can be converted to other substituted polystyrenes.	07041-5	5 g
Poly(chlorotrifluroethylene) [9002-83-9] *A2g* MW 500–600 Viscosity 12 cps @ 37° C Tg -40°, 52° (static method), Tg 100° (mechanical method) TSCA $[-CF_2CF(Cl)-]_n$ Inert liquid for high temperature baths.	15176-100	100 g
Poly(n-decyl acrylate) [29500-86-5] *CHX7g* (10g Polymer) MW ~130,000 TSCA Soft, tacky, hydrophobic polymer.	07042-50	50 g
New! Poly(2-dimethylaminoethyl methacrylate), 28% soln. in toluene *CH6g* MW 200,000 liquid Water soluble, cationic polymer.	25996-10	10 g
Poly(2,6-dimethyl-1,4-phenylene oxide) [25134-01-4] *A2g* MW 50,000 Mn 20,000 n_D^{20} 1.575 d 1.06 Tg 209° TSCA $[-C_6H_2(CH_3)_2O-]_n$ High softening point (90°), polydispersity ~2.5. Soluble in toluene, chloroform, chlorobenzene.	08794-100	100 g
Poly(dimethylsiloxane), methyl terminated [63148-62-9] *A2g* n_D^{20} 1.430 Tg -127° TSCA $[-Si(CH_3)_2O-]_n$ Inert hydrophobic liquids.		
MW 3,900 Viscosity 50 centistokes	09776-250	250 g
MW 6,000 Viscosity 100 centistokes	02274-250	250 g
MW 17,000 Viscosity 500 centistokes	03496-250	250 g

					Catalog #	Size
Poly(dimethylsiloxane ethylene oxide), methyl terminated [68937-54-2] *EH4g* d 1.07 TSCA Surfactant-like diblock copolymers.						
[25:75]	MW 600	n^{20}_D 1.442	Viscosity 20 cps		09780-100	100 g
[20:80]	MW 3,000	n^{20}_D 1.454	Viscosity 80–150 cps	liquid	21870-100	100 g
Poly ether ether ketone (PEEK) [29658-26-2] *A2g* mp 340° d 1.30 Tg 140° TSCA High temperature resistant polymer. Granules are dusted with a nominal 0.01% Calcium Stearate as a processing lubricant.					23969-50	50 g
Polyetherimide [61128-46-9] *A4g* MW 30,000 Mn = 17,000 d 1.27 Tg 217° TSCA High softening point (~200°) resin. Soluble in dichloromethane.					16845-100	100 g
Poly(ethyl acrylate) [9003-32-1] *CH7g* MW ~70,000 n^{20}_D 1.469 Tg -23° TSCA $[-CH_2CH(CO_2C_2H_5)-]_n$ Low Tg acrylic ester polymer.					17342-2	2 g
Poly(ethyl acrylate/acrylic acid), [50:50] [25085-35-2] TSCA Alkali-soluble or alkali-swellable acrylic random polymers.						
20% soln. in ethanol (2g polymer)			*CH4g*		19914-10	10 g
Flakes			*A2g*		21056-5	5 g
Poly(ethylene/acrylic acid) [92:8] [9010-77-9] *A2g* mp 100° C d 0.932 TSCA $(-CH_2CH_2-)_x[-CH_2CH(CO_2H)-]_y$ Modified polyethylene resin. Improved adhesion. Can be converted into ionomers. Random copolymer. Soluble in ternary solvents like perchloroethylene, IPA and toluene.					06517-100	100 g
Polyethylene [9002-88-4] *A2g* TSCA $[-CH_2CH_2-]_n$ Hydrophobic, easily processed or fabricated, resin. Soluble in xylene, tetralin, TCE @ 50-60° Mw/Mn = 1.10.						
MW 2K	mp 124°	n^{20}_D 1.545	d .97	Tg–125° lumps	07652-100	100 g
MW 135K	mp 140°	n^{20}_D 1.510	d .915	20µ powder chromatographic (reversed phase HPLC) grade	15184-100	100 g

	Catalog #	Size
Polyethylene, chlorinated, 25% Cl [64754-90-1] *A2g* TSCA $H(OCH_2CH_2)_n$ OH Useful as primer or coating resin due to good adhesion properties. Randomly chlorinated HDPE.	01814-100	100 g
Poly(3,4-ethylenedioxythiophene)/poly(styrenesulfonate), aqueous dispersion (PEDT/PSS) [155090-83-8] *U5g* Surface resistivity 730 KOhm/sq. Solid content 1.24%, sodium 280 ppm. Conductive polymer.	24215-100	100 g

Poly(ethylene glycol) [25322-68-3] *H3g*
n^{20}_D 1.4563 Tg -41° TSCA
$H(OCH_2CH_2)_nOH$
Water-soluble, nonionic, relatively inert, liquids or solids. Confers slip and humectant properties to coatings.The terms poly(ethylene glycol) and poly(ethylene oxide) refer to polymers which are chemically identical. Polymer chains are hydroxyl-terminated at both ends. At all except the lowest moleclarweights poly(ethylene glycol) has a broad molecular weight distribution ranging from ~0.5x to 1.5x the values shown.Molecular Weight (MW) is approximate. *For higher molecular weights, see Poly(ethylene oxide), page 292.* Soluble in alcohol, acetone, chloroform, toluene, dichloromethane.

				Catalog #	Size
MW 200	viscous liquid		Viscosity 4.3 cps @ 100° C	01112-250	250 g
MW 200	Mw/Mn 1.05g			15644-1	1 g
MW 300	viscous liquid	mp -15 to -8	Viscosity 5.8 cps @ 100° C	01110-250	250 g
MW 400	viscous liquid	mp 4–8	Viscosity 7.3 cps @ 100° C	01109-250	250 g
MW 600	viscous liquid	mp 20–25	Viscosity 10.5 cps @ 100° C	00684-250	250 g
MW 1,000	waxy solid	mp 37–40	Viscosity 17.4 cps @ 100° C	00682-250	250 g
MW 1,450	waxy solid	mp 43–46	Viscosity 25–32 cps @ 100° C	00679-250	250 g
MW 2,000	flakes	mp 68	Viscosity 38–49 cps @ 100° C	25360-250	250 g
MW 3,400	waxy solid, pharma grade	mp 54–58	Viscosity 75–110 cps @ 100° C	06102-250	250 g
MW 7,500	waxy solid	mp 60–63	Viscosity 700–900 cps @ 100° C	06103-250	250 g
MW 10–16K	hard solid	mp 129		22567-250	250 g
MW 20,000	hard solid	mp 61–64		22568-250	250 g
MW 1,540	waxy solid, pharma. grade	mp 43–46	Viscosity 25–32 cps @ 100° C	01102-100	100 g
MW 8,000	waxy solid, pharma. grade	mp 60–63	Viscosity 700–900 cps @ 100° C	17243-100	100 g

	Catalog #	Size
Poly(ethylene glycol) (200) adipate [68647-16-5] *A2g* MW 530 TSCA $H(OCH_2CH_2)_nO_2C(CH_2)_4CO(OCH_2CH_2)_nOH$ Water-soluble, biodegradable, polymer. Reaction product of one molecule of adipic acid and two molecules of PEG 200.	21509-100	100 g

Poly(ethylene glycol) bis (2-aminoethyl) [26062-79-3] *U5g*
Polydispersity 2 – 3 TSCA
A bifunctional Poly(ethylene glycol) derivative that can be used to conjugate proteins and drug substances for targeted drug delivery studies. Soluble in H_2O, MeOH, possibly other polar solvents.

	Catalog #	Size
[MW ~1,000]	24285-1	1 g
[MW 10,000]	24303-1	1 g

	Catalog #	Size
Poly(ethylene glycol) α-2-aminoethyl, μ-methoxy [80506-64-5] *H4g* MW 2,000 solid Mono amino poly(ethylene glycol) for protein conjugation.	24304-1	1 g
Poly(ethylene glycol)-bisphenol A diglycidyl ether adduct [37225-26-6] *H6g* MW 18,500 hard solid TSCA $(CH_3)_2C[C_6H_4\text{-}H\text{-}[OCH_2CH(OH)CH_2(OCH_2CH_2)_nOH]]_2$ Polymer contains more hydroxyl groups (4 or more) than poly(ethylene glycol).	04686-250	250 g
Poly(ethylene glycol) (n) diacrylate [26570-48-9] *HO5g* TSCA $H_2C{=}CHCO(OCH_2CH_2)_nO_2CCH{=}CH_2$ Long-chain, hydrophilic, crosslinking monomers. (n) value is MW of PEG unit.		
MW 200 n^{20}_D 1.464 750ppm MEHQ d 1.122 Viscosity 25 cps @ 25°	00669-250	250 g
MW 400 n^{20}_D 1.465 500ppm MEHQ d 1.117 Viscosity 57 cps @ 25°	01871-250	250 g
MW 4,000 mp 56–60°	15246-1	1 g
Poly(ethylene glycol) (n) diglycidyl ether [72207-80-8] *H4g* TSCA Crosslinker for amine-, hydroxyl-, and carboxyl-functional polymers. (n) value is MW of PEG unit.		
MW 200 WPE ~195	08209-100	100 g
MW 400 WPE ~280	08210-100	100 g
MW 600 WPE ~400	08211-100	100 g
MW 1,000 WPE ~600	24047-100	100 g
Poly(ethylene glycol) (n) dimethacrylate [25852-47-5] *H5g* TSCA $H_2C{=}C(CH_3)CO(OCH_2CH_2)_nO_2CC(CH_3){=}CH_2$ Long-chain hydrophilic, crosslinking monomers. (n) value is MW of PEG unit.		
MW 200 75 ppm HQ n^{20}_D 1.460 d 1.08 Viscosity 15 cps @ 25° C	00096-100	100 g
MW 400 245 ppm MEHQ Tg -21° d 1.117 Viscosity 85 cps @ 25° C	15179-100	100 g
MW 600 1,000 ppm MEHQ d 1.101 Viscosity 67 cps @ 25° C	02364-100	100 g
MW 1,000 90 ppm MEHQ & 250 ppm BHT d 1.1 Viscosity 76 cps @ 40° C	15178-100	100 g
MW 8,000 mp 54–57° C White solid	25428-2	2 g
MW ~20,000 bp >250° C White Solid	25406-5	5 g
Poly(ethylene glycol) (n) dimethyl ether [24991-55-7] n^{20}_D 1.455 $CH_3COCH_2(H_2)_nOCH_3$ Metal complexing and phase-transfer agents. (n) value is MW of PEG unit		
MW ~500 d. 1.05 g/mL @ 25° C	25405-25	25 g
MW 1,000 mp 36–40° d 1.10	17032-25	25 g
MW 2,000 mp 52–55°	17033-25	25 g

Poly(ethylene glycol) (n) distearate [9005-08-7] *A2g*
TSCA $CH_3(CH_2)_{16}CO(OCH_2CH_2)_nO_2C(CH_2)_{16}CH_3$
Waxy, water dispersible solid. n = value is MW of PEG unit. Soluble in IPA, hot water, mineral oil.

		Catalog #	Size
MW 200	mp 32–36°	02298-100	100 g
		02298-500	500 g
MW 400	mp 35–37°	01048-100	100 g
		01048-500	500 g
MW 6,000	mp 52–57°	19234-100	100 g

Poly(ethylene glycol) (750) monocarboxymethyl ether monomethyl ether [67665-18-3] *U4g* . .
Carboxylic acid-terminated poly(ethylene glycol). Can be coupled to molecules of biomedical interest using carbodiimides.

			Catalog #	Size
			21483-500	500 mg

Poly(ethylene glycol) (n) monomethacrylate [25736-86-1] *H5ad*
TSCA $H_2C=C(CH_3)CO(OCH_2CH_2)_nOH$
Long-chain hydrophilic macromonomers. Used to introduce hydrophilic sites into polymers, to stabilize emulsion polymers, and to prepare comb polymers. (n) value is MW of PEG unit.

			Catalog #	Size
MW 200	n^{20}_D 1.105	up to 700 ppm MEHQ inhibitor	16712-100	100 g
MW 400	n^{20}_D 1.114	800 -1,000 ppm MEHQ inhibitor	16713-100	100 g

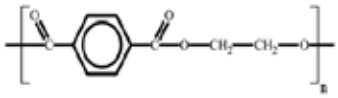
Poly(ethylene glycol) monomethyl ether [9004-74-4] *A2g*
TSCA $CH_3(OCH_2CH_2)_nOH$
Neutral, water-soluble, polymers with hydroxyl group at one end only.

					Catalog #	Size
MW 350	mp -8°	n^{25}_D 1.4555	d 1.091	Viscosity 4.1 cps @ 100° C	04200-500	500 g
MW 550	mp 20°	n^{25}_D 1.455	d 1.091	Viscosity 7.5 cps @ 100° C	04457-500	500 g
MW 750	mp 30°	n^{25}_D 1.459	d 1.082	Viscosity 10.3 cps @ 100° C	00626-500	500 g
MW 1,900	mp 52°		d 1.102	Viscosity 63 cps @ 100° C	04242-500	500 g
MW 5,000	mp 59°		d 1.106	Viscosity 613 cps @ 100° C	05986-500	500 g

Poly(ethylene glycol) (n) monomethyl ether monomethacrylate [26915-72-0] *BHJO6d*
TSCA $H_2C=C(CH_3)CO_2(CH_2CH_2O)_nCH_3$
Hydrophilic monomer used to introduce hydrophilic sites into polymers, to stabilize polymer emulsions and synthesis of comb polymers. (n) value is MW of PEG unit.

				Catalog #	Size
MW 200	n^{25}_D 1.449		100 ppm MEHQ and 300 ppm BHT inhibitor	16664-100	100 g
				16664-500	500 g
MW 400	n^{25}_D 1.457	Tg -62°	100 ppm MEHQ and 200 ppm BHT inhibitor	16665-100	100 g
				16665-500	500 g
MW 1000	n^{25}_D 1.46	Tg -40°	100 ppm MEHQ and 300 ppm BHT inhibitor	16666-100	100 g
				16666-500	500 g

	Catalog #	Size
Poly(ethylene glycol) (n) monomethyl ether, mono(succinimidyl succinate) ester *U5g* Reactive poly(ethylene glycol). Used to attach PEG chains to organic molecules, especially those of biomedical interest. (n) value is MW of PEG unit.		
MW 1,900	21482-500	500 mg
MW 5,000	18000-500	500 mg
Poly(ethylene glycol) (200) mono-stearate [9004-99-3] *A3g* TSCA Poly(ethylene glycol) having a hydrophobic chain end used as nonionic surfactant.	03142-100	100 g
Poly(ethylene glycol) / Poly(lactic acid) Diblock and Triblock Polymers (PEG/PLA) Polymer structures featuring polyethylene glycol (PEG), with biodegradable or biocompatible segments offering micellular, nano and microsphere morphologies which are useful for controlled release formulations. Molecular weights of blocks controlled by GPC. Alternative structures can be synthesized. Historically there have been three basic building block monomers for degradable polymers: lactides, glycolides and caprolactone. All are in clinical use and show varying degrees of degradability based on backbone compositions, crystallinity and molecular weights. Lactic acid is a "chiral" molecule having both (L) and (D) forms with (L) being the common metabolite. The family of lactic acid polymers includes the pure poly-L- lactic acid (L form of PLA), the pure poly-D-lactic acid and the poly-D,L-lactic acid (DL-PLA). Many other useful compositions occur when the polymer is organized into diblocks with ethylene glycol and/or glycolic acid comonomers or triblocks with ethylene glycol and/or glycolic acid. (Numbers in parenthesis refer to the MW of the segment) For Poly(ε-caprolactone)-block-poly(ethylene glycol) Diblock & Triblock Polymers, see page 285.		
Diblock Polymers *AK2bf*		
PEG(350)-b-PLA(300)	24375-0.5	0.5 g
	24375-1	1 g
PEG(1000)-b-PLA(750)	24378-0.5	0.5 g
	24378-1	1 g
PEG(1000)-b-PLA(5000)	24381-0.5	0.5 g
	24381-1	1 g
PEG(5000)-b-PLA(1000)	24386-0.5	0.5 g
	24386-1	1 g
PEG(5000)-b-PLA(5000)	24389-0.5	0.5 g
	24389-1	1 g
PEG(5000)-b-PLA(10,000)	25018-0.5	0.5 g
	25018-1	1 g
PEG(10,000)-b-PLA(5,000)	25017-0.5	0.5 g
	25017-1	1 g

		Catalog #	Size
Triblock Polymers *HU4bg*			
PLA(1000)-b-PEG(1000)-b-PLA(1000)		24500-0.5	0.5 g
		24500-1	1 g
PLA(2000)-b-PEG(1000)-b-PLA(2000)		24501-0.5	0.5 g
		24501-1	1 g
PLA(5000)-b-PEG(1000)-b-PLA(5000)		24502-0.5	0.5 g
		24502-1	1 g
PLA(1000)-b-PEG(4000)-b-PLA(1000)		24503-0.5	0.5 g
		24503-1	1 g
PLA(1000)-b-PEG(10,000)-b-PLA(1000)		24509-0.5	0.5 g
		24509-1	1 g
PLA(5,000)-b-PEG(10,000)-b-PLA(5,000)		25026-0.5	0.5 g
		25026-1	1 g
PLA(10,000)-b-PEG(10,000)-b-PLA(10,000)		25027-0.5	0.5 g
		25027-1	1 g
Poly(ethylene glycol terephthalate) [25038-59-9] *H2g* TSCA $(C_{10}H_8O_4)_n$ Polymer widely used in films, fibers, and drink bottles. Low gas permeability. 		04301-250	500 g
Poly(ethylene oxide) [25322-68-3] *H2g* White, free flowing powder TSCA $(-CH_2CH_2O-)_n$ Water-soluble polymer used to impart viscosity to and modify flow of aqueous solutions. Poly(ethylene oxide) has a broad molecular weight distribution ranging from ~0.5x to 1.5x the values shown. *For lower molecular weights, see Poly(ethylene glycol), page 288.* Soluble in acetone, alcohol, chloroform, toluene, dichloromethane.			
MW 100,000	Viscosity 5% AQ 30–50 cps	06104-500	500 g
MW 200,000	Viscosity 5% AQ 65–115 cps	17503-500	500 g
MW 300,000	Viscosity 5% AQ 600–1,200 cps	06105-500	500 g
MW 600,000	Viscosity 5% AQ 4,500–6,800 cps	06106-500	500 g
MW 1,000,000	Viscosity 2% AQ 400–800 cps	21295-500	500 g
MW 4,000,000	Viscosity 1% AQ 1,650–5,500 cps	04030-500	500 g
MW 5,000,000	Viscosity 1% AQ 5,500–7,500 cps	04031-500	500 g
MW 8,000,000	Viscosity 1% AQ 10,000–15,000 cps	21296-500	500 g

Poly(ethylene oxide-b-propylene oxide) [9003-11-6] *H4g*
TSCA $H(-OCH_2CH_2-)_x[-OCH(CH_3)CH_2-]_y(-OCH_2CH_2-)_2OH$
Water-soluble or water-dispersible polymers with surfactant properties. Chains are hydroxyl terminated. Polymers are p(EO/PO/EO) triblocks.

						Catalog #	Size
[0.15:1]	liquid	MW 1,100	n_D^{20} 1.4515	d 1.02	Viscosity 165 cps @ 100° C	16273-100	100 g
[0.8:1]	liquid	MW 2,900	n_D^{20} 1.4575	d 1.05	Viscosity 550 cps @ 100° C	16275-100	100 g
[0.33:1]	liquid	MW 3,400	n_D^{20} 1.4547	d 1.03	Viscosity 700 cps @ 100° C	16274-100	100 g
[5:1]	waxy solid	MW 8,750		d 1.06	Viscosity 1000 cps @ 100° C	16277-100	100 g
[3:1]	waxy solid	MW 13,300		d 1.02	Viscosity 3100 cps @ 100° C	16276-100	100 g

Polyethylene-co-vinyl acetate 70:30 (wt) [24937-78-8]
A highly biocompatible polymer used in a wide variety of biomedical device applications including drug delivery systems and medical implants. PEVA has many desirable characteristics (tensile strength, barrier properties, controlled release and optical transparency). Our PEVA is a highly purified copolymer with no processing additives and a low polydispersity index. PEVA can be processed in a large number of ways including spin coating, casting, molding, extrusion and a variety of emulsion and solution mixing. Polysciences Inc. can synthesize custom ethylene:vinyl acetate ratios and molecular weights, please use our custom inquiry form for more information.
For information on using PEVA in medical devices please see the following references: Hsieh, D. S. T., Rhine, W. D. and Langer, R. (1983), Zero-order controlled-release polymer matrices for micro- and macromolecules. Journal of Pharmaceutical Sciences, 72: 17–22. Tallury, P. et al. (2007), Poly(ethylene-co-vinyl acetate) copolymer matrix for delivery of chlorhexidine and acyclovir drugs for use in the oral environment: Effect of drug combination, copolymer composition and coating on the drug release rate. Dental materials, 23: Issue 4, 404-409.

						Catalog #	Size
MW 55,000						25356-25	25 g
MW 60,000						25357-25	25 g
MW 65,000						25358-25	25 g
MW 75,000						25359-25	25 g

Poly(ethylene/vinyl acetate) [24937-78-8] *A2g*
TSCA $(-CH_2CH_2-)_x[-CH_2CH(O_2CCH_3)-]_y$
Used as a hot-melt adhesive, wax additive, and precursor to poly(ethylene/vinyl alcohol) resins. Soluble in toluene, xylene, TCE, THF, MEK, n-butanol.

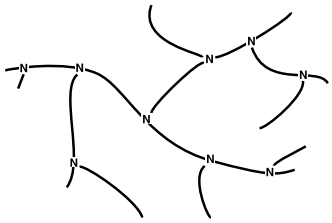
					Catalog #	Size
60:40 (wt)	mp 104°	d .964	Antioxidant 540 ppm BHT		06107-500	500 g
72:28 (wt)	mp 127°	d 0.95	~500 ppm BHT		06108-500	500 g

Poly(ethylene/vinyl alcohol) [25067-34-9] *A2g*
TSCA $(-CH^2CH^2-)x[-CH^2CH(OH)-]y$
Polymer containing both hydrophilic and hydrophobic segments. Could be used to prepare other ethylene copolymers. Used in packaging films. Soluble in DMF, DMSO, n-propanol.

					Catalog #	Size
85:15 (wt)					18099-100	100 g
74:26 (wt)					18100-100	100 g
44:56 (wt)	d 1.14	Tg 61°	mp 164°		17402-100	100 g
32:68 (wt)	d 1.19	Tg 69°	mp 181°		17403-100	100 g

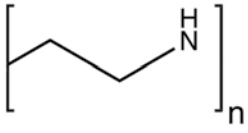
Poly(ethylene/maleic anhydride) 1:1 (molar) [9006-26-2] *H3g* . . . . . 02308-50 50 g
MW 400,000 Viscosity 2% 5cps TSCA
Reactive with alcohols, amines. Hydrolyzes in water to a water-soluble anionic polymer.

Polyethylenimine, branched [9002-98-6] *H6g*
d 1.029-1.038 TSCA
$(\text{-NHCH}_2\text{CH}_2\text{-})_x[\text{-N(CH}_2\text{CH}_2\text{NH}_2\text{)CH}_2\text{CH}_2\text{-}]_y$
Highly branched polyamine with high charge density. Liquid polymers. Soluble in water at all molecular weights, also soluble in lower alcohols, glycols, and THF. Polymers contain primary, secondary, and tertiary amine groups in approximately 25/50/25 ratio. See poly(2-ethyl-2-oxazoline) for precursors to linear polyethylenimine. Soluble in Water at all molecular weights, lower alcohols, glycols and THF.



				Catalog #	Size
99% soln. in water	MW 600	Viscosity 500–2500 cps	Polydisperity 1.08	02371-100	100 g
				02371-500	500 g
99% soln. in water	MW 1,200	Viscosity 3500–7500 cps	Polydisperity 1.08	06088-100	100 g
				06088-500	500 g
99% soln. in water	MW 1,800	Viscosity 8500–15,000 cps	Polydisperity 1.14	06089-100	100 g
				06089-500	500 g
99% soln. in water	MW 10,000	Viscosity >10,000 cps		19850-100	100 g
				19850-500	500 g
30% soln. in water	MW 10,000	Viscosity 100–200 cps		17938-100	100 g
30% soln. in water	MW 70,000	Viscosity 400–900 cps	Polydisperity 17±5.2	00618-100	100 g
				00618-500	500 g
30% soln. in water	MW 50K–100K	Viscosity 900–1500 cps		06090-100	100 g
				06090-500	500 g
50% soln. in water	MW 750,000	Viscosity 27,000 cps @ 20° C		25448-100	100 g
				25448-500	500 g
33% soln. in water	MW 750,000	Viscosity 1,400 cps @ 20° C		25449-100	100 g
				25449-500	500 g
25% soln. in water	MW 2,000,000	Viscosity 500–1,000 cps @ 20° C		25450-100	100 g
				25450-500	500 g

Polyethylenimine, Linear [9002-98-6] *HU4g*
powder TSCA
$(C_2H_5N)_x$
Linear polyethylenimines (PEIs) contain all secondary amines, in contrast to branched PEIs which contain primary, secondary and tertiary amino groups. The linear PEIs are solids at room temperature where branched PEIs are liquids at all molecular weights. Soluble in hot water, cold water at low pH, methanol, and ethanol. Insouble in bezene, ethyl ether, acetone, and cold water.
Contains up to 7-8% of poly(ethyl-2-oxazoline)



MW 2,500	mp 73–79°	24313-2	2 g
MW 25,000	mp 73–75°	23966-2	2 g
MW 100,000	mp 73–75°	25414-2	2 g
MW 250,000	mp ~72°	24314-2	2 g

	Catalog #	Size
Polyethylenimine "Max" – High Potency Linear PEI A nearly fully hydrolyzed linear polyethylenimine with longer contiguous ethyleneimine segments. Although N-deacylation reactions are notoriously difficult, our new linear polyethylenimine material is believed to contain more than 11% additional free (protonatable) nitrogens than our standard linear polyethylenimine material. Easy to handle hydrochloride salt form. Insoluble in common organic solvents (ethanol, acetone, tetrahydrofuran) Soluble in: cold and room temperature water.		
Polyethylenimine "Max", (MW 4,000) High Potency Linear PEI [9002-98-6] *H6g* . . . . . . MW ~2,500 (free base form) White to off-white free flowing solid TSCA Nominal 4,000 Mw in hydrochloride salt form. Comparable to *(Cat. #24313)* – Polyethylenimine, Linear, Mw 2,500 which is not in the hydrochloride salt form.	24885-2	2 g
Polyethylenimine "Max", (MW 40,000) High Potency Linear PEI [9002-98-6] *H6g* . . . . . White to off-white free flowing solid TSCA Molecular Weight: 25,000 Mw in free base form. Nominal 40,000 Mw in hydrochloride salt form. Comparable to *(Cat. #23966)* Polyethylenimine, Linear, Mw 25,000, which is not in the hydrochloride salt form. Soluble in Cold and room temperature water Insoluble in: Common organic solvents (ethanol, acetone, tetrahydrofuran).	24765-2	2 g
Polyethylenimine "Max", (MW 160,000) High Potency Linear PEI *H6g* . . . . . . MW 100,000 TSCA Molecular Weight (Mw): Mw in free base form. Nominal 160,000 Mw in hydrochloride salt form. Comparable to *(Cat. #25414)* Polyethylenimine, Linear, Mw 100,000 which is not in the hydrochloride salt form. Soluble in Cold, room temperature water.	25439-2	2 g
Polyethylenimine, branched, permethylated, permethobromide [28728-59-8] *U2g* . . . (1g polymer) MW ~6,300 (prepared from PEI MW 1,800) Highly branched, high charge density, quaternary ammonium polymer.	21903-10	10 g
Poly(2-ethyl-2-oxazoline) [25805-17-8] *A2g* n^{20}_D 1.520 d 1.14 Tg 70° TSCA $[-N(COC_2H_5)CH_2CH_2-]_n$ Neutral, water soluble, polymer. Also soluble in DMF, lower alcohols, methyl ethyl ketone and methylene chloride. Can be hydrolyzed to linear polyethylenimine.		
MW 5,000 — Viscosity 100% AQ @ 30° = 2.1 CST	24066-50	50 g
MW 50,000 — Viscosity 10% AQ @ 30° = 6.2 CST — Polydispersity ~1.9	17808-100	100 g
MW 200,000 — Viscosity 10% AQ @ 30° = 18-24 CST — Polydispersity ~3.4	24882-100	100 g
MW 500,000 — Viscosity 10% AQ @ 30° = 72.3 CST — Polydispersity ~3.4	17810-100	100 g
Poly(furfuryl alcohol) [25212-86-6] *H6g* . . . . . . n^{20}_D 1.36 Viscosity 14,500±2500 cps TSCA Dark, viscous, fluid with double bonds in the polymer backbone. Soluble in acetone, alcohol, esters, toluene.	15794-100	100 g
Poly(1-glycerol methacrylate) [28474-30-8] *U5g* . . . . . . TSCA Hydrophilic, water-swellable, polymer. Probably cross-linked.	16855-10	10 g

	Catalog #	Size
Poly(1-glycerol methacrylate) [28474-30-8] *U5g* TSCA Hydrophilic, water-swellable, polymer. Probably cross-linked.	16855-10	10 g
Poly(glycidyl methacrylate), 10% soln. in MEK [25067-05-4] *CH5g* (0.5g polymer) MW ~25,000 Tg 46° TSCA Reacts with carboxyl, hydroxyl, and amine groups and can be used to immobilize biomolecules.	06524-5	5 g
Poly(glycolic acid) [i.v. 1.0-2.0] [26124-68-5] *AK2be* MW >100,000 Tg 36° TSCA $H(OCH_2CO)_nOH$ Biodegradable polymer. Decomposes in 6 months at 37° at pH 9.0. Soluble in HFIP, HFA-sesquihydrate.	06525-5 06525-25	5 g 25 g
Poly(hexamethyleneadipamide) [32131-17-2] *A2g* (Nylon 6/6) mp 265–70° n^{20}_D1.530 d 1.22–1.25 Tg 45° TSCA $[-NH(CH_2)_6NHCO(CH_2)_4CO-]_n$ Polymer used in fibers. Soluble in cresols, formic acid, sulfuric acid.	06557-500	500 g
Poly(hexamethylenesebacamide) [9008-66-6] *A2g* (Nylon 6/10) mp 216°–233° n^{20}_D1.530 Tg 40° $[-NH(CH_2)_6NHCO(CH_2)_8CO-]_n$ Polymer used in fibers. Soluble in cresols, formic acid, sulfuric acid.	06558-500	500 g
Poly(hexyl isocyanate) [26746-07-6] *U2g* MW ~80,000 Viscosity i.v. ~1 Liquid crystal polymer	19249-1	1 g
Poly(4-hydroxybenzoic acid) [26099-71-8] *HU4g* MW 12,000–16,000 mp >320° Size: 40–60µm High-melting polymer, insoluble in organic solvents. Soluble in hot sulfuric acid, hot sodium hydroxide.	04306-25	25 g

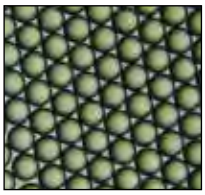
Poly[(R)-3-hydroxybutyrate] [26063-00-3] *A2g*
White or faintly beige powder $[-COCH_2CH(CH_3)O-]_n$
Polyhydroxybutyrates (PHBs) are the most common type of polyhydroxyalkanoates (PHAs) and were first discovered in prokaryotes as a high molecular weight storage molecule in cytoplasmic granules. There has been interest in the use of PHBs and PHB copolymers in the biodegradable plastics industry. The biodegradable and non-toxic effect of PHBs also make them a strong possibility for many medical applications, including drug release, bone regeneration, and nerve guidance. Purity 99.5%

~500	16930-1	1 g
~1,000	16932-1	1 g
~2,000	16934-1	1 g
~3,000	16936-1	1 g
~5,000	16938-1	1 g
~10,000	16940-1	1 g

		Catalog #	Size
Poly[(-)3-hydroxybutyric acid] [26063-00-3] *A2g* MW ~500,000 mp 168–176° Tg 15° $[-COCH_2CH(CH_3)O-]_n$ Biodegradable polymer. Soluble in chloroform, MDC, benzene, ethylene carbonate.		16916-10	10 g
Poly(2-hydroxyethyl methacrylate) [24249-16-5] MW ~200,000 n^{20}_D 1.512 Tg 55° TSCA $[CH_2C(CH_3)(CO_2CH_2CH_2OH)-]_n$ Polymer is water-insoluble but water-swellable. Used as a hydrogel. See 2-hydroxyethyl methacrylate. Soluble in 95% lower alcohols (5% water), DMF.			
powder	*A2g*	09689-25	25 g
12% soln. in ethanol	*CH5g*	18894-100	100 ml
Poly(2-hydroxyethyl methacrylate/methacrylic acid) [90:10] [31693-08-0] *A2g* TSCA Hydrophilic polymer, more readily water-soluble than poly(2-hydroxyethyl methacrylate), in the presence of alkali and aqueous 90% methanol.		08725-10	10 g
Poly(2-hydroxypropyl methacrylate) [25703-79-1] *A2g* Tg 76° TSCA $(CH_2C(CH_3)[CO_2CH_2CH(OH)CH_3]-)_n$ Hydrophilic polymer. Soluble in lower alcohols.		09690-10 09690-50	10 g 50 g
Poly(4-iodostyrene/styrene/divinylbenzene) ~58:40:2 [72330-89-3] *U4g* 200–400 mesh Reactive styrene polymer easily converted into other derivatives via the iodine atom. Technical Data Sheet #920		18148-5	5 g
Polyisobutylene [9003-27-4] *A2g* n^{20}_D 1.505 -1.510 Tg -73° TSCA $[-CH_2C(CH_3)_2-]_n$ Generally inert, tacky, polymers. Primarily used as tackifying agent in polymer formulations.			
MW 500	Viscosity 210–227 cps @ 38° liquid	09894-100	100 g
MW 1,350	Viscosity 30,000 cps @ 38° viscous liquid	09896-100	100 g
Poly(dl-lactic acid) [26969-66-4] *AK2bf* d 1.25 Tg 55° Amorphous, biodegradable polymer. Polydispersity 1.8 Soluble in MDC, THF, ethyl acetate, acetone.			
i.v. 0.15–0.30	MW 15,000	22505-10	10 g
i.v. 0.35–0.45	MW 20,000–30,000	16585-10	10 g
i.v. 2.0–2.8	MW 300,000–600,000	23976-10	10 g

					Catalog #	Size
Poly(l-lactic acid) [33135-50-1] *AK2bf* mp 173–178° Tg 60–65° [-OCH(CH_3)CO-]$_n$ Biodegradable polymer. Degradation rate is inversely related to polymer molecular weight. Crystalline polymer with higher molecular weight polymers having a crystallinity of about 70%.						
i.v. 0.10–0.20	MW ~1,600–2,400				18580-10	10 g
i.v. 0.80–1.20	MW ~140,000–160,000	d 1.24			06529-1	1 g
					06529-10	10 g
i.v. 1.30–1.60	MW ~80,000–100,000				18402-10	10 g
i.v. 4.00–5.00	MW ~325,000–460,000	d 1.15			18582-10	10 g
i.v. >7.00	MW ~700,000				21512-10	10 g
Poly(l-lactic acid) Molecular Weight Kit *HK2bg* Biodegradable polymer. Degradation rate is inversely related to polymer molecular weight. **Kit Contains**: 5g each of polymers with i.v. values of 0.10–0.20, 0.80–1.20, 1.30–1.60, 4.00–5.20					18599-1	1 kit
Poly(dl-lactide/glycolide) [26780-50-7] *HK2bg* [-OCH(CH_3)CO-]$_x$[-OCH_2CO-] Biodegradable polymers. Copolymers are easier to synthesize than homopolymers. Polydispersity 1.8 Soluble in MDC, THF, ethyl acetate, acetone.						
[90:10]	i.v. 0.15–0.30	MW 10,000			19076-5	5 g
[85:15]	i.v. 0.55–0.75	MW ~20,000	Tg 50–55°	d 1.27	23989-5	5 g
[75:25]	i.v. 0.55–0.75	MW ~97,000	Tg 50–55°	d 1.30	25107-5	5 g
[80:20]	i.v. 0.15–0.30	MW 10,000	Tg 50–55°		19077-5	5 g
[70:30]	i.v. 0.12–0.3	MW 10,000			19247-5	5 g
[50:50]	i.v. 0.50–0.65	MW ~12K – 16K	Tg 45–50°	d 1.34	23986-5	5 g
[50:50]	i.v. 0.8 – 1.2	MW 150,000	Tg 45–50°		23987-5	5 g
Poly(l-lactide/glycolide) [70:30] [30846-39-0] *AK2bf* Biodegradable polymer. Polydispersity 1.8						
i.v. 0.15–0.30	MW <10,000				16587-5	5 g
i.v. 0.40–0.60	MW 10,000–20,000	powder			21864-5	5 g

Poly(Lactic Acid-co-Glycolic Acid) Uniform Dry Microspheres *HK5cd*
(PLGA)
We offer microspheres comprised of two PLGA polymer ratios (50:50 and 75:25 Lactic Acid:Glycolic Acid) in three narrow sizes (75µm, 100µm and 120µm; 5-10% CVs). These highly uniform particle populations serve as excellent models for controlled degradation rate measurements, and for the development of prototype scaffolds or devices. Lyophilized to resist biodegradation. Custom quotations on other PLGA microparticles, alternative biodegradable polymer family types or microparticles with specific active components upon request. Technical Data Sheet #858



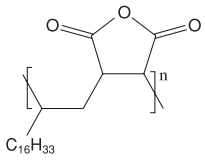
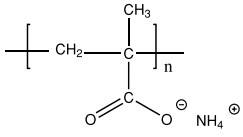
			Catalog #	Size
(LA:GA) 50:50	MW ~150,000	Size Range 70–80µm	25401-100	100 mg
			25401-250	250 mg
			25401-500	500 mg
(LA:GA) 50:50	MW ~150,000	Size Range 95–105µm	25402-100	100 mg
			25402-250	250 mg
			25402-500	500 mg
(LA:GA) 50:50	MW ~150,000	Size Range 115–125µm	25403-100	100 mg
			25403-250	250 mg
			25403-500	500 mg
(LA:GA) 75:25	MW ~90,000	Size Range 70–80µm	25398-100	100 mg
			25398-250	250 mg
			25398-500	500 mg
(LA:GA) 75:25	MW ~90,000	Size Range 95–105µm	25399-100	100 mg
			25399-250	250 mg
			25399-500	500 mg
(LA:GA) 75:25	MW ~90,000	Size Range 115–125µm	25400-100	100 mg
			25400-250	250 mg
			25400-500	500 mg

Poly(lauryl acrylate), 20% soln. in toluene [26246-92-4] *CH6g* . . . . . 09697-25 25 g
Tg ~ -3° TSCA
Tacky, low Tg acrylic polymer. Prepared from lauryl alcohol of natural origin,mixed C8-C16 alcohols, principally C12. Hydrocarbon soluble polymer.

Poly(lead methacrylate 2-ethylhexanoate/methyl methacrylate) [83:17] (by wt.) [71052-47-6] *UV7g* . . . . . 16399-25 25 g
Radio-opaque polymer.

Poly(l-lysine hydrobromide) [25988-63-0] *U5g*
Cationic polymer. Used to improve cell adhesion to solid surfaces.
Journal of Cell Biology, Mazia, Schatten & Sale, 66 (1975) page 198.

MW 50,000	powder	18619-50	50 mg
MW 275,000		25724-100	100 mg
MW 80,000	0.1% soln. in water	09730-25	25 ml
		09730-250	250 ml
MW 120,000	powder	21430-100	100 mg

	Catalog #	Size
Poly(maleic acid), 50% soln. in water [26099-09-2] *H5g* MW 800–1200 d 0.97 TSCA Polyacid, water-soluble.	09732-10	10 g
Poly(maleic anhydride) [24937-72-2] *U5g* MW ~10,000 TSCA Polymer reacts with amines, alcohols.	02348-5	5 g
Poly(maleic anhydride 1-octadecene) 1:1 (molar) [25266-02-8] *A2g* MW 30,000–50,000 d 0.97 TSCA Alkali-soluble hydrophobic resin. Reacts with amines and alcohols. Soluble in organic solvents such as; acetone, benzene, carbon tetrachloride, decalin, dimethylcarbitol, ethyl acetate, methyl isobutyl ketone and 1,2-dichloroethane. Insoluble in alcohols such as ethanol and propanol. Will slowly dissolve as esterification of the anhydride occurs. 	05152-100	100 g
Polymethacrylamide [25014-12-4] *A2g* Hydrophilic, water-soluble polyamide. Soluble in water, methanol, ethylene glycol and acetone.	16144-10	10 g
Poly(methacrylic acid) [25087-26-7] *HU7g* MW ~100,000 Tg 228° TSCA Water-soluble polymer. Soluble in water, methanol, alkaline water.	00578-10 00578-50	10 g 50 g
Poly(methacrylic acid) ammonium salt, 30% soln. in water [25086-15-1] *H5g* (7.5g polymer) MW 15,000 Viscosity 75–200 cps (pH 8.0–9.5) TSCA $[-CH_2C(CH_3)(CO_2H)-]_x[-CH_2C(CH_3)(CO_2H)-]_y$ Low molecular weight, water-soluble polymer. Forms insoluble polysalts with polyamines. Used as a pigment dispersant. 	21169-25	25 g
Poly(methacrylic acid) sodium salt, 30 % soln. in water [25086-62-8] *H2g* MW 15,000 Viscosity 200 cps pH 10 TSCA Low molecular weight, water-soluble polymer. Forms insoluble polysalts with polyamines. Used as a pigment dispersant.		
(7.5g polymer)	21170-25	25 g
(30g polymer)	21170-100	100 g
Poly(2-methacryloxyethyltrimethylammonium bromide) [68912-04-9] *H2g* (2g polymer) MW 200,000 Cationic (quaternary ammonium), water-soluble polymer. Soluble in 20% in water.	21746-10	10 g
Poly(methacryloyl chloride), 25% soln. in dioxane [26937-45-1] *CHM6g* (2.5g polymer) Polymer reacts readily with alcohols and amines. Can be used to prepare polymers bearing bioactive molecules.	04315-10	10 g

Poly(methyl methacrylate) [9011-14-7] *A2g*
n_D^{20} 1.49 d 1.20 Tg 105° TSCA
$[-CH_2C(CH_3)(CO_2CH_3)-]_n$
Hard, stable, non-yellowing polymer used in coating and in molded clear plastic objects. Soluble in acetone, toluene, chloroform, MEK, THF.

				Catalog #	Size
i.v. 0.18	MW 25,000	atactic beads, 200µm	Polydispersity ~3.0	04554-500	500 g
i.v. 0.40	MW 75,000	atactic beads, 200µm	Polydispersity ~2.8	04553-500	500 g
	MW 100,000	atactic pellets		17913-500	500 g
i.v. 1.25	MW 500,000	atactic beads, 200µm	Polydispersity 2.7	04552-500	500 g

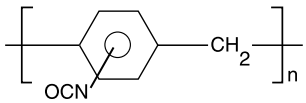
Poly(methyl methacrylate/n-butyl methacrylate) [26284-14-0] *A2g* . . . . . 01922-500 500 g
MW ~25,000 Tg 50° TSCA
Used in coatings. Molar Ratio of MMA/BMA: ~1:2.

Poly(methyl methacrylate/methacrylic acid) [25086-15-1] *A2g*
TSCA
$[-CH_2C(CH_3)(CO_2CH_3)-]_x[-CH_2C(CH_3)(CO_2H)-]_y$
Random copolymer. Used in positive electron beam photoresists. Soluble in ethyl cellosolve acetate, 9:1 IPA-water.

				Catalog #	Size
[75:25]	MW ~1.2 million			08208-100	100 g
[80:20]				08221-100	100 g
[90:10]	MW ~100,000			08207-50	50 g
[95:5]	MW ~500,000	powder	Dispersity ~4	19629-100	100 g

Poly(methyl methacrylate/methacrylic acid 5 aminofluoresceinamine) *A2g* . . . . . 24911-1 1 g
MW ~100,000 TSCA
$[-CH_2C(CH_3)(CO_2CH_3)-]_x[-CH_2C(CH_3)(CO_2H)-]_y$
[~90:91% wgt] Fluorescent Polymer. Random copolymer. Used in positive electron beam photoresists. Fluorescent label: 1% weight. Soluble in ethyl cellosolve acetate, 9:1 IPA-water.

Poly[methylene(polyphenyl) isocyanate] [9016-87-9] *H5g* . . . . . 03099-100 100 g
MW ~360 d 1.24 TSCA
$[-C_6H_3(NCO)CH_2-]_n$
Low molecular weight polyisocyanate, reacts with glycols, polyamines to form gels. NCO content ~30% Soluble in acetone, THF, toluene.



Poly(α-methylstyrene) [25014-31-7] *H4g*
$[-CH_2C(CH_3)(C_6H_5)-]_n$
Oligomers with well defined melting points.

			Catalog #	Size
MW 5,000	Tg 168°	TSCA	07630-500	500 g
MW ~850,000	Mw/Mn ~1.08		24867-250	250 mg

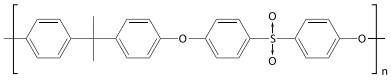
Poly(4-methylstyrene/styrene) [90:10] [24936-42-3] *A2g* . . . . . 19831-10 10 g

	Catalog #	Size
Poly(N-methylvinylamine) [31245-56-4] *U2g* MW ~500,000 Water-soluble all-secondary polyamine.	24038-5	5 g
Poly(N-methyl N-vinyl acetamide) homopolymer *HK4g* Off white to slightly yellow powder A free flowing solid that has hydrophilic character. The material may be converted to poly(N-methyl vinyl amine) by subsequent hydrolysis of the acetamide functional group.	24810-50	50 g
Poly(octadecyl methacrylate) [25639-21-8] *CH6g* (40g polymer) MW ~170,000 Tg -100° TSCA $(-CH_2C(CH_3)[CO_2(CH_2)_{17}CH_3]-)_n$ Long-chain alkyl methacrylate. Soluble in hydrocarbons.	04321-100	100 g
Poly(oxyethylene) sorbitan monolaurate (Tween 20®) [9005-64-5] *A2g* MW 1,227.5 n_D^{20} 1.468 d 1.095 TSCA Water-soluble surfactant. Technical Data Sheet #912	06110-100	100 g
Poly(N-iso-propylacrylamide) [25189-55-3] *A2g* MW ~40,000 mp >200° Tg 85° TSCA Polymer is water-soluble at room temperature, insoluble above ~40°. Solubility ceiling has been used in mold and cell growth techniques since cells adhere to polymer film at incubation temperatures and are released as medium is cooled and polymer is dissolved. Soluble in THF, dioxane, DMF, cold water, chloroform.	21458-10	10 g
Polypropylene *A2g* TSCA $[-CH_2CH(CH_3)-]_n$ Widely used polyolefin. Soluble in chlorinated hydrocarbons, aromatic hydrocarbons, isoamyl acetate. Technical Data Sheet #920		

[9003-07-0]	Tg -13°	mp 165°	Chromatographic Grade 25–85µm	04342-100	100 g
[9003-07-0]			Chromatographic Grade 150µm	06068-100	100 g
Atactic	Tg –13°	n_D^{20} 1.474		23968-100	100 g
[25085-53-4]	Tg -8°	mp 176–186°	Isotactic MW 220,000 / Mn 40,000 flakes	06536-100	100 g

Poly(propylene glycol) (600) diglycidyl ether [26142-30-3] *H4g* Viscosity 60–180 cps WPE ~530 TSCA Crosslinker for amine-, hydroxyl-, and carboxyl-functional polymers.	24046-100	100 g
Poly(propylene glycol) dimethacrylate [25852-49-7] *HO7d* MW of PEG Block = 400 bp >300° n_D^{20} 1.452 d 1.01 100 ppm MEHQ & 100 ppm BHT TSCA $H_2C=C(CH_3)CO(OC_3H_6)_nO_2CC(CH_3)=CH_2$ Water-insoluble crosslinking monomer. (n) value is MW of PEG unit.	04380-250	250 g

			Catalog #	Size
Poly(propylene glycol) [25322-69-4] *A2g* (propylene oxide) n^{20}_D 1.450 Tg -75° TSCA $H[OCH(CH_3)CH_2]_nOH$ More hydrophobic than poly(ethylene glycol). Polymer is water-insoluble but is water dispersible. Soluble in acetone, toluene, chloroform, dioxane, THF.				
MW 400	d 1.007	Hydroxyl number 263mg KOH/g polymer	04784-250	250 g
MW 4,000	d 1.005	Hydroxyl number 28 mg KOH/g polymer	04788-250	250 g
Poly(iso-propyl methacrylate) [26655-94-7] *A2g* n^{20}_D 1.473 Tg 79° $(-CH_2C(CH_3)[CO_2CH(CH_3)_2]-)_n$			07052-10	10 g
Polypyrrole [30604-81-0] *A2g* Conductive polymer. Not soluble in any organic solvents or water. Conductivity 12 S/cm.			21304-5	5 g
Polystyrene [9003-53-6] mp 240° atactic flakes TSCA $[-CH_2CH(C_6H_5)-]_n$ Widely used high Tg polymer. Soluble in toluene, MEK, THF, dioxane, xylene.				
MW 800–5,000		softening point 125°	23637-100	100 g
MW 50,000		bimodal with MW ~50,000 &1500 (50:50)	18544-100	100 g
MW 125,000–250,000			00574-100	100 g
Polystyrene, brominated [88497-56-7] *H2g* (Bromine 66%) d 2.1 Tg 130 – 140° powder TSCA Polystyrene with reduced flammability.			21305-100	100 g
Poly(styrene-b-isoprene-b-styrene) *A2g* MW 19,000 (6,500/6,000/6,500)			18347-250	250 mg
Poly(styrene/acrylonitrile) [75:25] [9003-54-7] *A2g* n^{20}_D 1.570 d 1.08 TSCA $[-CH_2CH(C_6H_5)-]_x[-CH_2CH(CN)-]_y$ High Tg polymer used as molding compound.			07053-500	500 g
Poly(styrene/butadiene) [85:15] [9003-55-8] *A2g* MW ~110,000 d 1.05 Tg 33-41° C TSCA $[-CH_2CH(C_6H_5)-]_x(-CH_2CH=CHCH_2-)_y$ Rubber modifier, random copolymer. Soluble in aromatic and chlorinated hydrocarbons, ketones.			07073-500	500 g
Poly(styrene/divinyl benzene) [9003-70-7] *A2g* TSCA Beads for preparation of crosslinked poly(chloromethylstyrene) Merrifield resins and other functionalized beads. Technical Data Sheet #920				
[98:2]	200–400 mesh		16724-100	100 g
[92:8]	200–400 mesh		04022-100	100 g

			Catalog #	Size
Poly(styrene/maleic anhydride) [009011-13-6] *U2g* n_D^{21} 1.564 TSCA Alternating copolymer. Reactive polymeric anhydride. Reacts with alcohols, amines.				
[67:33] (molar)	MW 7,500		03497-500	500 g
[75:25] (molar)	MW 9,500	mp 115–130°	03498-500	500 g
Poly(styrene/methyl methacrylate) [70:30] [25034-86-0] *A2g* MW 270,000 n_D^{20} 1.560 Tg 102° Polydispersity ~5 Random copolymer. High Tg polymer.			15783-250	250 g
Poly(styrenesulfonic acid) [28210-41-5] *B6g* (75g polymer) MW 70,000 d 1.10 Viscosity ~200 cps TSCA Water-soluble ionic polymer in acid form. Soluble in lower alcohols, glycols.			08770-250	250 g
Poly(styrenesulfonic acid), sodium salt [25704-18-1] *A2g* d 0.801 g/mL at 25° C TSCA $[-CH_2CH(C_6H_4SO_3Na)-]_n$ Water-soluble ionic polymer in salt form.				
MW 75,000	Polydispersity 3–5	Viscosity 20% AQ 15–55 cps	08772-25	25 g
MW 1,000,000	Polydispersity 3–30		08773-25	25 g
Poly(styrenesulfonic acid/maleic acid), sodium salt [73282-68-5] *HK4g* Water-soluble polymer. Has been used as a pigment dispersant.				
[1:1] (molar)	MW 15,000	.25% soln. in water (6.25g polymer)	11795-25	25 g
[3:1] (molar)	MW 20,000	Viscosity 30% AQ 30 cps	18407-25	25 g
Poly(styrenesulfonyl fluoride) [705-33-9] *BHO7bg*			16146-5	5 g
Polysulfone [25154-01-2] *A2g* MW 30,000 n_D^{20} 1.633 Tg 176° TSCA High melting polymer used in preparation of filters for biological materials. Cell and protein adhesion is very low. Soluble in DMF, THF, ketones, toluene, chloroform. 			07074-500	500 g
Polysulfone, dihydroxy terminated [25135-51-3] *U4g* Can be modified via hydroxyl groups, converted into graft copolymers.			21186-5	5 g
Poly(tert-butyl methacrylate) [25189-00-8] *U4g* Tg 107° $[-CH_2C(CH_3)[CO_2C(CH_3)_3]-]_n$ Hard, thermally sensitive, methacrylate ester. Decomposes thermally to poly(methacrylic acid).			07037-25	25 g
Poly(tetrafluoroethylene) [9002-84-0] *A2g* n_D^{20} 1.350–1.380 d 2.28 Tg -113° TSCA $(-CF_2CF_2-)_n$ Inert polymer. Soluble in perfluoro kerosene. Technical Data Sheet #920				
(Teflon® 30B)	60% nonionic disp. in H_2O	Viscosity ~20 cps	21539-100	100 g
(Teflon® 7A)	powder		08816-100	100 g
(Teflon® 6)	powder		01344-100	100 g

	Catalog #	Size
Poly(tetrafluoroethylene propylene) (PTFE) *A2g* . . . . . Copolymer.	04615-50	50 g
	04615-250	250 g

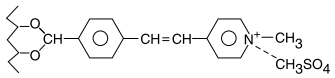
Poly(tetramethylene ether glycol) (Polytetrahydrofuran) [25190-06-1] *AK2g*
d .97 Tg -84° TSCA
$H(OCH_2CH_2CH_2CH_2)_nOH$
More hydrophobic polyether than poly(ethylene glycol). Hydroxyl groups at chain ends.Soluble in alcohol, slightly in water.

MW 650	Hydroxyl No. = 170	mp 15°	n^{20}_D 1.462	07784-500	500 g
MW 1,000	Hydroxyl No. = 112	mp 19°		07785-500	500 g
MW 2,900	Hydroxyl No. = 38	mp 35-37°	n^{20}_D 1.464	17746-500	500 g

Poly(N-vinyl acetamide) homopolymer), Crosslinked *HK4g* . . . . . Viscosity 200 mPa at 1 wgt % White to slightly yellow-white powder Cationic resin. *This product is available in convenient protective foil packages for laboratory scale and in bulk quantities for larger projects. Call for custom quotations on large orders.* Soluble in water and alcohol.	24807-50	50 g
Poly(vinyl acetate) [9003-20-7] *A2g* . . . . . MW 90,000 n^{20}_D 1.462 d 1.18 Tg 32° TSCA $[-CH_2CH(O_2CCH_3)-]_n$ Water sensitive resin, readily hydrolyzed. Used to prepare poly(vinyl alcohol) of varying degrees of hydrolysis. Soluble in toluene, acetone, chloroform, alcohol, THF.	06069-500	500 g
Poly(vinyl acetate), 40% hydrolyzed [25213-24-5] . . . . . MW 72,000 TSCA Hydrophilic polymer, highly swollen in water.	17561-25	25 g

Poly(vinyl alcohol) [9002-89-5] *H5g*
mp >220° d 1.29 Tg 85° TSCA
Water-soluble resins of low toxicity. Resins at high % hydrolysis require heating at ~96° C in water for solution. Resins of lower % hydrolysis can be dissolved at progressively lower temperatures with 88% hydrolyzed resin requiring only 85° C for solution.

MW ~6K	80 mol% hydrolyzed	Polydispersity ~1.7	Viscosity 2.5–3.5% @ 4% AQ cps	22225-500	500 g
MW ~25K	88 mol% hydrolyzed	Polydispersity ~1.9	Viscosity 5.2–6.2% @ 4% AQ cps	02975-500	500 g
MW ~25K	98 mol% hydrolyzed	Polydispersity ~2.0	Viscosity 5.5–6.0% @ 4% AQ cps	04397-500	500 g
MW ~78K	88 mol% hydrolyzed	Polydispersity ~1.9	Viscosity 23–27% @ 4% AQ cps	15132-500	500 g
MW ~78K	98 mol% hydrolyzed	Polydispersity ~1.7	Viscosity 28.5–32.5% @ 4% AQ cps	15130-500	500 g
MW ~78K	99.7 mol% hydrolyzed	Polydispersity ~1.7	Viscosity 28–3 2% @ 4% AQ cps	15129-500	500 g
MW ~108K	99.7 mol% hydrolyzed	Polydispersity ~1.7	Viscosity 62–72% @ 4% AQ cps	04324-500	500 g
MW ~125K	88 mol% hydrolyzed	Polydispersity ~2.0	Viscosity 45–55% @ 4% AQ cps	04398-500	500 g
MW ~133K	99 mol% hydrolyzed	Polydispersity ~2.4	Viscosity 62–72% @ 4% AQ cps	02815-500	500 g

	Catalog #	Size
Poly(vinyl alcohol), N-methyl-4(4′-formylstyryl) pyridinium methosulfate acetal [107845-59-0] *U5acd* (10g polymer) (sbQ-PVA) MW ~45,000 4.1 mol SbQ TSCA Polymer has high dielectric constant. Water-soluble, photocrosslinkable, polymer. Used in making silkscreen print screens. Soluble in organic solvents such as acetone. 	22570-75	75 g
Poly(vinylamine) hydrochloride [26336-38-9] *U5g* MW 25,000 TSCA Water-soluble all-primary polyamine.	23965-1 23965-5	1 g 5 g
Poly(vinyl butyral) *A2g* n^{20}_D 1.480–1.490 d 1.100 Tg 50° TSCA Tough, solvent-soluble, resin. Broad MW distribution. Contains ~20% vinyl alcohol and ~2% vinyl acetate, the rest butyral. Soluble in acetone, alcohols, THF, MEK.		
MW 70,000–100,000	24617-50	50 g
MW 100,000–150,000	06100-50	50 g
Poly(N-vinylcarbazole) [25067-59-8] *A2g* MW ~40,000 mp >320° n^{20}_D 1.683 Tg 200° TSCA Photoconductive polymer, especially in the form of complexes. Soluble in toluene, chloroform, THF, Dioxane. Technical Data Sheet #263	02428-50	50 g
Poly(vinyl chloride) [9002-86-2] *A2g* MW 110,000 n^{20}_D 1.540-1.550 d 1.39 Polydispersity ~2 <75µm Tg 81° TSCA $[-CH_2CH(Cl)-]_n$ Widely used industrial resin with good resistance to water, other environmental factors.	09708-250	250 g
Poly(vinyl cinnamate) [9050-06-0] *A2g* TSCA $[-CH_2CH(O_2CCH=CHC_6H_5)-]_n$ Photocrosslinkable polymer. Soluble in THF, NMP (may contain some insoluble material).	02648-10	10 g
Poly(vinylidene chloride/acrylonitrile) [80:20] [9010-76-8] *A2g* MW 150,000 d 1.6 Viscosity 2% DMF 2.2 cps Tg 50° TSCA $(-CH_2CCl_2-)_x[-CH_2CH(CN)-]_y$ Polymer with barrier properties as coatings or films. Soluble in DMF, THF.	09747-100	100 g
Poly(vinylidene fluoride) [24937-79-9] *A2g* mp 155–160° n^{25}_D 1.420 d 1.76 Tg -40° TSCA $(-CH_2CF_2-)_n$ Inert coating resin. Polydispersity 2.5–3.0 Soluble in DMF, DMAc, DMSO, ethylene carbonate.		
mp 165–172° melt viscosity 5–12K poise (ASTM D-3835)	15190-100	100 g
mp 165–172° melt viscosity 15–23K poise	15191-100	100 g
mp 160° melt viscosity 26K poise	06094-100	100 g
mp 155–160° melt viscosity 28–34K poise	18734-100	100 g

	Catalog #	Size
Poly(vinyl chloride/vinyl acetate/maleic acid) [86:13:1] [25085-82-9] *A2g* d 1.35 Viscosity i.v. 0.50 Tg 74° TSCA Internally plasticized poly(vinyl chloride), improved solubility in organic solvents and improved adhesion to substrates.	18356-500	500 g
Poly(vinyl methyl ether), 50% aqueous solution [9003-09-2] *H4gm* MW ~30,000 n^{20}_D 1.467 d 1.030 Tg -34° $[-CH_2CH(OCH_3)-]_n$ Tacky resin. Water-insoluble above 28°. Used to prepare heat-sensitive latex. Soluble in aromatic and chlorinated hydrocarbons, alcohols, esters, glycols.	03032-500	500 g
Poly(vinyl methyl ether), 50% methanol solution *C5g* Viscosity 4500–6500 mPa-s Liquid $CH_3OCH:CH_2)_n$	25505-100	100 g
Poly(vinyl methyl ketone) [25038-87-3] *A2g* n^{20}_D 1.50 d 1.12 $[-CH_2CH(COCH_3)-]_n$ Reactive polyketone. Soluble in ketones, THF, dioxane, DMF, chloroform, ethyl acetate.	04320-10	10 g
Poly(2-vinyl-1-methylpyridinium bromide, 20% soln. in water [29471-77-0] *H4g* (2g polymer) MW 50,000 Cationic quaternary ammonium polymer. Degree of quaternization ~50%	21477-10	10 g
Poly(4-vinylphenol) [24979-70-2] *A2g* n^{20}_D 1.600 d 1.2 Tg 150° TSCA $[-CH_2CH(C_6H_4OH)-]_n$ Reactive polyphenol. Has applications in photoresists. Soluble in THF, lower alcohols, dioxane. Technical Data Sheet #198		
MW 1,500–7,000 Polydispersity 1.5 – 2.2	06527-10	10 g
	06527-50	50 g
MW 9,000–11,000 Polydispersity ~3	18979-10	10 g
	18979-50	50 g
MW 22,000 Polydispersity ~5 SIze -50	18980-10	10 g
MW 9,000–11,000 Polydispersity ~3	25447-10	10 g
	25447-50	50 g
Poly(4-vinylphenol) brominated, 50% Br *A2g* MW 8,000 Tg 120° Polydispersity 2 Softening Point 210° Flame-retardant polymer. Technical Data Sheet #198	09762-50	50 g
Poly(vinylphosphonic acid), 30% Soln. [27754-99-0] *BH4g* MW 24,000 Polydispersity ~1.24 Water-soluble polymeric phosphonic acid.	24297-10	10 g

			Catalog #	Size
Poly(2-vinylpyridine) [25014-15-7] *A2g* mp >200° Tg 104° TSCA Water-soluble at low pH has adhesive-promoting properties. Soluble in acetic acid, t-butanol, DMF, DMSO, lower alcohols.				
MW 40,000	Viscosity 20% isopropanol 30–90 cps		21382-10	10 g
MW 200K–400K	Viscosity 20% methanol 300–1800 cps		19238-10	10 g
MW 300K–400K			17770-10	10 g
Poly(vinyl phosphoric acid), sodium salt [104626-27-6] *A2g* MW >200,000 Phosphorous content min 5% Water-soluble polymeric phosphate ester. Uncrosslinked.			04391-5	5 g
Poly(2-vinylpyridine) [25232-41-1] d 1.10 Tg 142° TSCA Water-soluble at low pH, has adhesive-promoting properties. Soluble in acetic acid, t-butanol, DMF, DMSO, lower alcohols.				
MW 50,000	Viscosity 20% methanol solution 15–50 cps	*H5g*	00112-50	50 g
MW 150,000–200,000		*A2g*	22176-50	50 g
Poly(N-vinyl acetamide-co-sodium acrylate) *HK4fg* Viscosity 300 mPa at 0.2 wgt % Tg 192° C White to slightly yellow-white powder Cationic resin. *This product is available in convenient protective foil packages for laboratory scale and in bulk quantities for larger projects. Call for custom quotations on large orders.* Soluble in water and alcohol.			24809-50	50 g
Poly(4-vinylpyridine / divinylbenzene) [19017-40-7] *U7g* Used as absorbent and ion-exchange resin. Technical Data Sheet #920			06579-10	10 g
Poly(2-vinylpyridine N-oxide) [9016-06-2] *A2g* MW 300,000–400,000 Water-soluble cationic resin. Soluble in alcohols.			01564-10	10 g
Poly(4-vinylpyridine N-oxide) [26715-00-4] *A2g* MW ~200,000 Water-soluble cationic resin. Soluble in alcohols.			23684-10	10 g
Poly(N-vinyl acetamide) [28408-65-3] *HK4g* (PNVA, Poly(N-vinylacetamide)) MW ~4,060,000 Viscosity 11 mPa at 0.2% Tg 189° C white to off-white powder $[C_4H_7No]_{n'}$ Unlike many polyvinylpyrrolidones (PVPs), it offers greater viscosity stability at higher temperatures and in the presence of salts such as sodium chloride. Unlike sodium polyacrylates, Poly(N-vinyl acetamide) maintains stability as a function of pH over a wide range from about pH 2-14. Soluble in moderately soluble in water, methanol, ethanol and blends of alcohols with water.			24808-50	50 g

				Catalog #	Size
Poly(N-vinylpyrrolidone) [9003-39-8] *A2g* n^{20}_D 1.530 TSCA Water-soluble polymer used as a thickener, protective colloid. Soluble in alcohols, chloroform, nitroparaffins, water, MDC.					
MW 2,500	Polydispersity 1.9	5% AQ 1.25 – 1.37	Tg ~90° C	16693-250	250 g
MW 4,000–6,000				24737-250	250 g
MW 10,000	Polydispersity 3.6	1% AQ 1.21 – 1.28	Tg 155° C	03315-250	250 g
MW 40,000	Polydisperisty 3.33	1% AQ 2.7	Tg 168° C	01051-250	250 g
MW 40,000, pharma. grade	Polydispersity 3.33	1% AQ	Tg 168° C	01052-250	250 g
MW 1,000,000	Polydispersity ~2.00	1% AQ 4.90	Tg >175° C	06067-250	250 g
Poly(N-vinylpyrrolidone/2-dimethylaminoethyl methacrylate), dimethyl sulfate quaternary [53633-54-8] *A2g* MW 100,000 TSCA Water-soluble cationic (quaternary ammonium) polymer. Soluble in 20% in water.				16294-100	100 g
Poly(N-vinylpyrrolidone/vinyl acetate), 50% soln. in isopropanol [25086-89-9] *CH6g* (50g polymer) d .955 Tg 108° TSCA Hydrophilic neutral polymer. Soluble in alcohols, THF, water, dioxane, ketones, MDC, toluene.					
[30:70]	MW 25,000			09718-100	100 g
[50:50]	MW 45,000			09717-100	100 g
[70:30]	MW 66,000			09716-100	100 g
Poly(vinylsulfonic acid) sodium salt, 25% soln. in water [9002-97-5] *A2g* (25g polymer) MW 4,000–6,000 TSCA Water-soluble anionic polymer. Has been used as a pigment dispersant 25% soln. in water. May contain a small percentage of insoluble material. Soluble in 25% in water.				04392-100	100 g
Pullulan, desalinized [9057-02-7] *A2g* Viscosity 10% AQ solution at 30° 100–180 cps TSCA Natural polysaccharide from Aureobasidium pullulans.				21115-50	50 g

S

Starch, poly(acrylamide/acrylic acid) graft, acid sodium salt [9005-25-8] *H5g* TSCA particle/size 75% between 40–120 mesh pH 7.5. Water-absorbing, water-holding, resin.				08215-100	100 g

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Adjuncts

A

	Catalog #	Size
Acrylic cement, MC-Bond *HM6g* Solvent-type cement for acrylic, PETG, or polycarbonate sheet. Forms strong bonds after short contact time. Technical Data Sheet #270	16752-4Q 16752-0.5	4 x 1 qt 4 x 0.5 gal
Alumina, activated powder [1344-28-1] *H5g* MW 102.1 TSCA Al_2O_3 Used to remove inhibitor from monomers. Recommended for use with Inhibitor Removal Column *(Cat. #19708)*.	23678-250	250 g
3-Aminopropyltriethoxysilane [919-30-2] *B6bg* MW 221.37 bp 217° TSCA $H_2N(CH_2)_3Si(OC_2H_5)_3$ Reacts with glass and other silaceous surfaces creating aminopropyl substituents. Surfaces so modified have enhanced adhesion properties and can adsorb anionic matter.	01983-250	250 g

B

Benzil (Photopolymerization catalyst) *HU5g* MW 210.2 mp 95° TSCA $C_6H_5COCOC_6H_5$ UV polymerization catalyst. Technical Data Sheet #370	01946-25	25 g
Benzoin ethyl ether [574-09-4] *HV7ag* MW 240.3 mp 60° TSCA $C_6H_5CH(OC_2H_5)COC_6H_5$ UV polymerization catalyst.	01359-50	50 g
Benzoin iso-propyl ether [6652-28-4] *H5g* MW 254.3 mp 78° TSCA $C_6H_5CH[OCH(CH_3)_2]COC_6H_5$ UV polymerization catalyst.	00932-25	25 g
Benzoin methyl ether (UV Catalyst) [3524-62-7] *H6g* MW 226.3 mp 47 - 49° TSCA $C_6H_5CH(OCH_3)COC_6H_5$ UV polymerization catalyst.	00425-10	10 g
Benzoyl peroxide, 70% active (water wet) [94-36-0] *FH4gp* MW 242.23 mp 105° TSCA $(C_6H_5CO)_2O_2$ Thermal polymerization catalyst.	21446-100	100 g

	Catalog #	Size
Benzoyl Peroxide, Plasticized [94-36-0] *GH5g* MW 242.23 Dry powder $(C_6H_5CO)_2O_2$ Thermal polymerization catalyst.	24232-100	100 g
N,N-Benzyldimethylamine [103-83-3] *BEH6g* (BDMA; N,N-Dimethylbenzylamine) MW 135.21 mp 75° $C_6H_5CH_2N(CH_3)_2$ Low viscosity epoxy accelerator.	00141-100 00141-500	100 g 500 g
N,N-Bis(2-hydroxyethyl)-4-toluidine, 94% [3007-12-1] *HK3abcd* MW 195.2 mp 50° TSCA $CH_3C_6H_4N(CH_2CH_2OH)_2$ Accelerator or promoter in peroxide-catalyzed polymerizations.	04011-100	100 g
4'4-Bis(dimethylamino)benzophenone [90-94-8] *HM7g* MW 268.4 mp 175° TSCA Photopolymerization catalyst.	03440-50	50 g

C

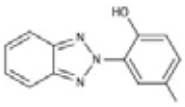
dl-Camphorquinone [10373-78-1] *U6g* MW 166.22 mp 198 - 200° TSCA (C=2,CH_3OH) Blue light (visible) catalyst for polymerization.	17181-10	10 g

D

Dibutyl phthalate [84-74-2] *H4g* MW 278.4 bp 340° n_D^{20}1.493 d 1.042 TSCA C_6H_4-1,2-$[CO_2(CH_2)_3CH_3]_2$ Plasticizer for polymers such as poly(vinyl chloride), poly(methyl methacrylate) and poly(vinyl acetate).	00434-450	450 g
Dibutyltin dilaurate [77-58-7] *BH6g* MW 631.6 mp 24° bp 205° n_D^{20}1.470 d 1.066 Yellowish liquid TSCA $[CH_3(CH_2)_{10}CO_2]_2Sn[(CH_2)_3CH_3]_2$ Catalyst for polymerizing lactide and glycolide and isocyanate reactions.	01862-50	50 g
4,4'-Difluorobenzophenone [345-92-6] *V5g* MW 218.20 mp 106° - 109° Crystalline powder This UV Light Stabilizer is used extensively in plastics, cosmetics, and films. The primary function is to protect the long-term degradation from all forms of wavelength of light. This benzophenone works by absorbing the UV radiation and preventing the formation of free radicals.	24296-25	25 g

	Catalog #	Size
4,4'-Dihydroxybenzophenone [611-99-4] *U5g* MW 214.20 mp 213° - 215° This UV Light Stabilizer is used extensively in plastics, cosmetics, and films. The primary function is to protect the long-term degradation from all forms of wavelength of light. This benzophenone works by absorbing the UV radiation and preventing the formation of free radicals.	24295-25	25 g
Dimethylaminoethanol (DMAE) [108-01-0] *BE6g* MW 89.14 bp 130° - 136° TSCA $HOCH_2CH_2N(CH_3)_2$ Curing agent for epoxy resins.	01458-100	100 g
Diphenyl adipate MW 298.3 mp 105° - 106° Solid plasticizer for polymers.	19521-25	25 g
DMP-30 [90-72-2] *BH6g* MW 265.4 bp 316° n^{20}_D 1.515 Viscosity ~200 cps Straw to yellow liquid TSCA $[(CH_3)_2NCH_2]_3C_6H_2OH$ Curing catalyst for epoxy resins.	00553-100	100 g
Dodecenylsuccinic anhydride (DDSA) [19780-11-1] *H2g* MW 266.38 bp 181°/5mm n^{20}_D 1.479 d 1.005 Viscosity 440 cps TSCA Epoxy hardener, suitable for use in embedding procedures.	00563-450 00563-4	450 g 4 x 450 g

H

2-(2'-Hydroxy-5'-methylphenyl)-benzotriazole [244-22-4] *HO4g* (Tinuvin P®) MW 225.2 mp 128 - 132° d 1.40 yellow granules A highly efficient UV absorbent *(absorbs UV between 270 - 340nm)* used in polystyrene, polyester, polycarbonate, Perspex, polyethylene, ABS resin, epoxy resin and cellulose resin. Absorbs almost no visible light, making it useful for colorless transparent and pale colored products. Can be used in plastic products for food. 	21363-25	25 g
2-Hydroxy-4-n-octoxybenzophenone [1843-05-6] *U2g* MW 326.4 mp 47.5° TSCA $CH_3(CH_2)_7OC_6H_3(OH)COC_6H_5$ UV-absorber.	01925-50	50 g

I

Inhibitor Removal Column Inhibitor Removal Column features 250ml capacity. Recommended packing: Alumina *(Cat. #23678)* removes phenolic inhibitor from ~170 volumes of monomer where inhibitor content is 100ppm. The Inhibitor Removal Column is suitable for use with De-Hibit 200 *(Cat. # 24013)* for the removal of phenolic inhibitors from neutral monomers. 	19708-1	1 unit

M, N, O, P, S

	Catalog #	Size
Methyl Benzoylformate *H7ad* $C_6H_5COCO_2CH_3$ Synthesis intermediate, photoinitiator for UV curable systems.	17308-25	25 g
Nadic Methyl Anhydride (NMA) [25134-21-8] *HO6g* MW 178.2 n_D^{25}1.505 Liquid anhydride for curing epoxy resins. This material is a mixture of methyl isomers of methylbicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic anhydride. The larger the proportion of NMA used in the epoxy resin formula, the harder the resultant block.	00886-450	450 g
Nonenyl Succinic Anhydride (NSA), EM Grade [28928-97-4] *H4g* Acid Number min. 470 MW 224 n_D^{20}1.476 (lit.) d 1.032 Curing agent for epoxy resins. *J. Biochem., 113, 573 (1993)*	01542-450 01542-4	450 g 4 x 450 g
Octenylsuccinic anhydride [26680-54-6] *H7g* MW 210.3 bp 320° n_D^{20}1.469 d 1.000 TSCA Used as a replacement for hexenylsuccinic anhydride in Polyscience' Ultra Low Viscosity Epoxy Embedding Kit, *(Cat. #17706)*. Acid Number min. 520	19830-100	100 g
Poly/Bed® 812 Embedding Media *H4g* Viscosity 100 - 200 cps TSCA Epoxy resin for embedding. Cured by amine catalysts. Exact WPE number supplied on label, ranging from 140 - 160. Technical Data Sheet #233	08791-500	500 g
2-iso-Propylthioxanthone 97% [5495-84-1] *H4g* MW 254.3 mp 66° - 73° Yellow powder TSCA Photopolymerization catalyst.	21314-25	25 g
SAR-GEL® Water Indicating Paste Water indicating paste provides a fast, reliable way to detect water bottoms in storage tanks containing gasoline and gasoline/alcohol blends, diesel, jet fuel, fuel oil, solvents and other materials. Benefits: • Easy to apply – no messy jars, no need to mix, easy cleanup • No guessing – complete color change from white to brilliant pink • Faster reaction – immediate detection means less time wasted • Easy to see water line – does not run • Useful in detecting water content in laboratory recycled reagents, as well as other stain line reagents and solvents such as xylene and absolute alcohol	24615-1 24615-12	1 oz 12 x 1 oz tubes

T, U

Tinuvin Acid *H4bg* (Ciba Geigy) Solid Tinuvin based compounds are used as UV absorbers and as building blocks for drug development. Tinuvin acid is a hydroxyphenyl-benzotriazole compound with an acid group that allows further reactivity. Related derivatives of this compound have been used as UV absorbers that provide efficient protection of light sensitive substrates.	25473-1 25473-5	1 g 5 g

	Catalog #	Size
2,4,6-Trimethylbenzoyldiphenylphosphine oxide [75980-60-8] *H4ag* MW 348.0 mp 87° - 93° C Yellow crystals $(CH_3)_3C_6H_2COP(O)(C_6H_5)_2$ Photopolymerization initiator.	24067-10	10 g
12-Tungstosilicic Acid [12027-43-9] *A2bg* (silicotungstic Acid) MW 3310.7 Soluble in water. $H_4SiO_412WO_3XH_2O$ Catalyst for organic synthesis, minerals separation, reagent for alkaloids. Formula Weight: 2878.28 (anhy)	03424-25	25 g
Uvitex® 2B [27344-41-8] *BH6g* (C.I. Fluorescent Brightener 362; Derivative of stilbene disulfonic acid.) Yellow powder TSCA UV absorver. Ex. max: 350nm Em. max: 435nm in PBS Buffer	19517-10	10 g

W

New! Wolbers Solvent Gel Kit™ *C4g*

Renowned conservator Richard Wolbers has partnered with Polysciences, Inc. to make his well-known solvent gels available in convenient, ready-to-use kits. Available as single 100 mL jars, Standard Kits, Mix & Match Kits or in bulk quantities. Kits can be customized to include the specific gels and quantities desired. (for example; 3 xylene gels, 2 acetone gels and 1 NMP gel can be purchased in a Mix and Match Kit)

Features:

- Clean aged, discolored and soiled varnish
- 6 gels, with a range of polarities
- No mixing, formulating or chemical handling required
- Gel form increases the working time for coating removal

Wolbers Solvent Gel Kit™	25674-1	1 kit
PolySol™ D60 Gel	25675-100	100 ml
Xylene Gel	25676-100	100 ml
Benzyl Alcohol Gel	25677-100	100 ml
Isopropanol Gel	25678-100	100 ml
Acetone Gel	25679-100	100 ml
NMP Gel	25680-100	100 ml

Polymer Standards & Kits

Polysciences, Inc., provides a comprehensive series of carefully characterized, ultrapure, polymer and particle standards for use in calibrating columns and instruments. Polymer molecular weight standards were prepared by techniques which yield narrow molecular weight distribution and when this is not possible by fractionation of polymers of broader molecular weight distribution. We have listed standards of a range of molecular weights for widely studied polymers. For your special needs we can prepare quotes on items not listed.

Molecular Weight Standards

Each catalog listing for a molecular weight standard describes the polymer by an approximate Molecular Weight (MW) and an approximate polydispersity value (Mw/Mn). The Molecular Weight averages have been rounded for descriptive purposes.

Homopolymers, Individual Standards and Kits

		Catalog #	Size
Dextran [9004-54-0] *A2g* Soluble in water.			
MW ~10,000	Mw/Mn ~1.50	19411-250	250 mg
MW ~40,000	Mw/Mn ~1.50	19412-250	250 mg
MW ~60,000	Mw/Mn ~1.70	24832-250	250 mg
MW ~180,000	Mw/Mn ~2.16	24239-250	250 mg
MW ~500,000	Mw/Mn ~3.25	24766-250	250 mg
MW ~636,400	Mw/Mn ~1.80	24767-250	250 mg
Polyacrylamide [9003-05-8] *A2g* Soluble in water.			
MW 12,000	Mw/Mn ~1.50	18255-250	250 mg
MW 22,000	Mw/Mn ~1.60	18256-250	250 mg
MW 65,000	Mw/Mn ~1.60	18257-250	250 mg
MW 80,000	Mw/Mn ~1.80	19410-250	250 mg
MW 400,000	Mw/Mn ~2.60	19790-250	250 mg
MW 600,000	Mw/Mn ~2.50	18259-250	250 mg
MW 1,000,000	Mw/Mn ~2.50	18260-250	250 mg
MW 5,000,000	Mw/Mn ~2.30	18263-250	250 mg
MW 9,000,000	Mw/Mn ~2.10	18543-250	250 mg
Poly(acrylic acid), sodium salt [9003-04-7] *H4g* Soluble in water.			
MW 2,000	Mw/Mn ~1.60	18744-250	250 mg
MW 5,000	Mw/Mn ~1.60	18745-250	250 mg
MW 8,000	Mw/Mn ~1.30	18746-250	250 mg
MW 20,000	Mw/Mn ~1.40	18747-250	250 mg
MW 35,000	Mw/Mn ~1.60	18748-250	250 mg
MW 70,000	Mw/Mn ~1.80	18749-250	250 mg
MW 85,000	Mw/Mn ~1.80	18750-250	250 mg

		Catalog #	Size
MW 150,000	Mw/Mn ~1.70	18751-250	250 mg
MW 250,000	Mw/Mn ~1.60	18752-250	250 mg
MW 500,000	Mw/Mn ~1.60	18753-250	250 mg
MW 800,000	Mw/Mn ~1.60	18754-250	250 mg
MW 1,300,000	Mw/Mn ~1.50	18755-250	250 mg

Polybutadiene [9003-17-2] *A2g* . . . . . 09827-1 1 g
MW ~2,800 Mw/Mn ~1.20 Soluble in solvents: hydrocarbons, tetrahydrofuran, higher ketones, higher aliphatic esters.

Poly(tert-butyl methacrylate) [9003-31-0] *A2g* . . . . . 21175-250 250 mg
MW ~10,000 Mw/Mn ~1.07 Soluble in solvents: hydrocarbons, tetrahydrofuran, higher ketones, higher aliphatic esters. Can be easily transesterified to prepare standards for other methacrylate esters.

Polyethylene

NIST Standard for determining melt flow rate in polymers. Melt flow rate is widely used in polymer technology as a product specification since this value, which includes a statement of the load and temperature under which it is obtained, gives an indication of the processing properties of the polymer.[1, 2]

1. ASTM D 1238-00; Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer; ASTM Standards, Vol. 08.01, American Society for Testing and Materials, West Conshohocken, PA (2001) 2. Taylor, B.N.; Guide for the Use of the International System of Units (SI); NIST Special Publication 811; Ed. (April 1995)

Polyethylene, branched [9002-88-4] *A2g* . . . . . 08277-1 1 g
Soluble in Solvents (hydrocarbons, tetrahydrofuran, higher ketones, higher aliphatic esters). Limiting viscosity number = 0.8132 dl/g in 1-chloronaphthalene.

Polyethylene, linear [9002-88-4] *A2g* . . . . . 09829-1 1 g
MW 52,000 Mw/Mn ~2.90 Soluble in 1-chloronaphthalene, 1,2,4-trichlorobenzene, decalin above 80°.

Poly(ethylene glycol) [25322-68-3] *A2g*
Soluble in water, benzene, chloroform, dimethylformamide, esters, alcohols.

MW ~600	Mw/Mn ~1.10	15645-1	1 g
MW ~1,000	Mw/Mn ~1.10	15646-1	1 g
MW ~1,500	Mw/Mn ~1.10	15647-1	1 g
MW ~5,000	Mw/Mn ~1.10	15648-1	1 g
MW ~9,000	Mw/Mn ~1.10	15649-1	1 g
MW ~11,000	Mw/Mn ~1.10	16913-1	1 g
MW ~20,000	Mw/Mn ~1.13	17172-1	1 g

		Catalog #	Size
1, 4-Poly isoprene [9003-31-0] *A2g* Soluble in solvents: hydrocarbons, tetrahydrofuran, higher ketones, higher aliphatic esters. Can be easily transesterified to prepare standards for other methacrylate esters.			
MW ~1,000	Mw/Mn ~1.20	09828-250	250 mg
MW ~4,700	Mw/Mn ~1.15	18006-250	250 mg
MW ~30,000	Mw/Mn ~1.05	16202-250	250 mg
MW ~300,000	Mw/Mn ~1.05	16203-250	250 mg
Poly(methacrylic acid), sodium salt [54193-36-7] *H7g* Soluble in water.			
MW ~7,000	Mw/Mn ~1.04	21180-250	250 mg
MW ~25,000	Mw/Mn ~1.03	21181-250	250 mg
MW ~70,000	Mw/Mn ~1.05	21182-250	250 mg
MW ~350,000	Mw/Mn ~1.03	21184-250	250 mg
Poly(methyl methacrylate) [9011-14-7] *A2g* Soluble in solvents: aromatic hydrocarbons, chlorinated hydrocarbons, methyl ethyl ketone, ethyl acetate.			
MW ~6,000	Mw/Mn ~1.05	21172-250	250 mg
MW ~12,000	Mw/Mn ~1.04	21173-250	250 mg
MW ~30,000	Mw/Mn ~1.10	16204-250	250 mg
MW ~60,000	Mw/Mn ~1.10	16206-250	250 mg
MW ~75,000	Mw/Mn ~1.04	08287-250	250 mg
MW ~100,000	Mw/Mn ~1.10	16209-250	250 mg
MW ~125,000	Mw/Mn ~1.04	08288-250	250 mg
MW ~150,000	Mw/Mn ~1.10	16211-250	250 mg
MW ~185,000	Mw/Mn ~1.10	18756-250	250 mg
MW ~225,000	Mw/Mn ~1.04	21104-250	250 mg
MW ~350,000	Mw/Mn ~1.15	16214-250	250 mg
Poly(methyl methacrylate), isotactic *A2g* MW ~100,000		21489-250 08729-250	250 mg 250 mg
Poly(alpha-methylstyrene) [25014-7] *A2g* Soluble in solvents: aromatic hydrocarbons, chlorinated hydrocarbons, tetrahydrofuran, esters.			
MW ~20,000	Mw/Mn ~1.15	16218-250	250 mg
MW ~400,000	Mw/Mn ~1.05	18530-250	250 mg
MW ~850,000	Mw/Mn ~1.08	24867-250	250 mg

		Catalog #	Size
Polypropylene [9003-07-0] *A2g* Soluble in solvents: hydrocarbons, chlorinated hydrocarbons.			
MW ~50,000	Mw/Mn <2.20	19905-250	250 mg
MW ~100,000	Mw/Mn <3.40	19906-250	250 mg
MW ~140,000	Mw/Mn <3.70	19907-250	250 mg
MW ~200,000	Mw/Mn <4.90	19908-250	250 mg
MW ~230,000	Mw/Mn <5.60	19909-250	250 mg
MW ~350,000	Mw/Mn <8.00	19910-250	250 mg
Polystyrene [9003-53-6] *A2g* Soluble in solvents: aromatic hydrocarbons, chlorinated hydrocarbons, tetrahydrofuran, esters.			
MW ~300 (liquid)	Mw/Mn ~1.20	22404-250	250 mg
MW ~500 (liquid)	Mw/Mn ~1.20	22405-250	250 mg
MW ~600	Mw/Mn ~1.30	08279-250	250 mg
MW ~1,000	Mw/Mn ~1.30	16227-250	250 mg
MW ~2,000	Mw/Mn ~1.30	16228-250	250 mg
MW ~4,000	Mw/Mn ~1.04	08280-250	250 mg
MW ~9,000	Mw/Mn ~1.04	16231-250	250 mg
MW ~20,000	Mw/Mn ~1.06	01844-250	250 mg
MW ~30,000	Mw/Mn ~1.06	16234-250	250 mg
MW ~35,000	Mw/Mn ~1.06	16235-250	250 mg
MW ~50,000	Mw/Mn ~1.06	18544-100	100 mg
MW ~63,000	Mw/Mn ~1.04	09821-250	250 mg
MW ~100,000	Mw/Mn ~1.06	00867-250	250 mg
MW ~200,000	Mw/Mn ~1.06	02356-2w50	250 mg
MW ~160,000	Mw/Mn ~1.10	18346-250	250 mg
MW ~400,000	Mw/Mn ~1.06	03823-250	250 mg
MW ~600,000	Mw/Mn ~1.10	16239-250	250 mg
MW ~900,000	Mw/Mn ~1.10	16240-250	250 mg
MW ~1,000,000	Mw/Mn ~1.10	16241-250	250 mg
MW ~1,800,000	Mw/Mn ~1.10	16242-250	250 mg
MW ~3,000,000	Mw/Mn ~1.20	07676-250	250 mg
MW ~6,000,000	Mw/Mn ~1.20	16243-250	250 mg
MW ~20,000,000	Mw/Mn ~1.30	16244-250	250 mg
MW ~30,000,000	Mw/Mn ~1.30	16315-250	250 mg

	Catalog #	Size
Polystyrene, 60% isotactic [MW ~ 1,780,000] [25086-18-4] *A2g* . . . . . Soluble in solvents: aromatic hydrocarbons, chlorinated hydrocarbons, tetrahydrofuran, esters. Mw/Mn ~2.25 Used as a polystyrene tacticity standard.	02963-250	250 mg
Polystyrene, fluorescein labeled *A2g* Soluble in solvents: aromatic hydrocarbons, chlorinated hydrocarbons, tetrahydrofuran, esters. Can be used as a marker in column chromatography.		
MW ~3,200 Mw/Mn ~1.20	21658-100	100 mg
MW ~12,000 Mw/Mn ~1.20	21659-100	100 mg
Poly(styrene sulfonic acid), sodium salt [9080-79-9] *U7g* Soluble in water.		
MW ~1,000 Mw/Mn ~1.20	24812-250	250 mg
MW ~3,600 Mw/Mn ~1.20	24813-250	250 mg
MW ~4,600 Mw/Mn ~1.10	16248-250	250 mg
MW ~8,000 Mw/Mn ~1.10	16249-250	250 mg
MW ~18,000 Mw/Mn ~1.10	16250-250	250 mg
MW ~35,000 Mw/Mn ~1.10	16251-250	250 mg
MW ~67,000 Mw/Mn ~1.20	18008-250	250 mg
MW ~220,000 Mw/Mn ~1.10	16254-250	250 mg
MW ~450,000 Mw/Mn ~1.20	26252-250	250 mg
MW ~509,000 Mw/Mn ~1.15	24831-250	250 mg
Poly(2-vinylpyridine) [25014-157] *A2g* Soluble in solvents: benzene, methanol, tetrahydrofuran, pyridine, water at low pH. Cationic MW standard.		
MW ~3,000 Mw/Mn ~1.29	22509-250	250 mg
MW ~7,000 Mw/Mn ~1.31	22510-250	250 mg
MW ~30,000 Mw/Mn ~1.45	22565-250	250 mg
MW ~240,000 Mw/Mn ~1.70	22563-250	250 mg

Molecular Weight Standard Kits

	Catalog #	Size
Poly(ethylene glycol) Kit [25322-68-3] 5x250mg each of MW 100, 1,000, 5,000, 9,000, 15,000.	16900-1	1 kit
Polstyrene (Broad MW Range) Kit [9003-53-6] 10x250mg each of MW 600, 1,000, 4,000, 20,000, 50,000, 100,000, 400,000, 1,000,000, 6,000,000, 20,000,000.	16902-1	1 kit
Polystyrene (Low MW) Kit 5x250mg each of MW 4,600, 6,500, 35,000, 67,000, 780,000.	18009-1	1 kit
Poly(styrenesulfonic acid, sodium salt) Kit 5x250 mg each of MW 4,600, 6,500, 35,000, 67,000, 780,000.	19918-1	1 kit

Block Copolymer Standards

There are many possible block copolymer compositions, we have listed only our 2 most popular products with relatively few permutations. Within the polymer systems listed below we are capable of producing many products that fit your particular needs.

Poly(isoprene-1,4-b-styrene) [MW 135,000] *A2g* (~67,500/67,500) Mw/Mn = 1.06	21697-250	250 mg
Poly(methyl methacrylate-b-styrene) [MW 20,500] (10,700/9800) Mw/Mn = 1.14	21702-250	250 mg

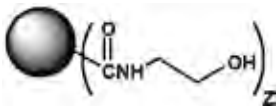
Monodisperse Dendrimers

Polysciences, Inc. has partnered with Dr. Donald A. Tomalia's latest nanotechnology company, NanoSynthons LLC, to make high quality dendrimers available in research quantities. Dr. Tomalia, the pioneering scientist and inventor of dendrimers, founded NanoSynthons to provide high purity building blocks for material science and nanomedicine. "Dendrimer" refers to a broad category of well-defined soft nanoparticles that possess three major architectural components, namely: 1) a core, 2) an interior and 3) surface. Reminiscent of an onion, a dendrimer begins with a core and is grown in size by the construction of a series of concentric layers/shells, derived from branched monomers referred to as generations (G). DAB-PAMAM Dendrimers are available with the following Surface Groups: Amino, Amido-ethanol and Sodium Carboxylate

Amidoethanol Surface Group (Neutral)

Core: DAB **Surface Group**: Amidoethanol **Generation**: 0 - 5

New! Amidoethanol Surface Group (Neutral) *H4f*

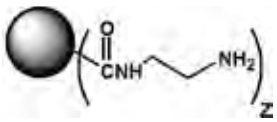


	Catalog #	Size
G0	25698-100	100 mg
	25698-500	500 mg
G1	25699-100	100 mg
	25699-500	500 mg
G2	25700-100	100 mg
G3	25701-100	100 mg
	25701-500	500 mg
G4	25702-100	100 mg
	25702-500	500 mg
G5	25703-100	500 mg
	25703-500	500 mg

Amino Surface Group (Cationic)

Core: DAB **Surface Group**: Amino **Generation**: 0 - 5

New! Amino Surface Group (Cationic) *H4f*

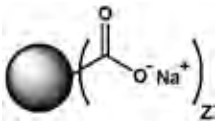


G0	25692-100	100 mg
	25692-500	50 mg
G1	25693-100	100 mg
	25693-500	500 mg
G2	25694-100	100 mg
	25694-500	500 mg
G3	25695-100	100 mg
	25695-500	500 mg
G4	25696-100	100 mg
	25696-500	500 mg
G5	25697-100	100 mg
	25697-500	500 mg

Sodium Carboxylate Surface Group (Anionic)

Core: DAB **Surface Group**: Sodium Carboxylate **Generation**: 0.5 - 5.5

New! Carboxylate Surface Group (Anionic) *H4f*



	Catalog #	Size
G0.5	25704-100	100 mg
	25704-500	500 mg
G1.5	25705-100	100 mg
	25705-500	500 mg
G2.5	25706-100	100 mg
	25706-500	500 mg
G3.5	25707-100	100 mg
	25707-500	500 mg
G4.5	25708-100	100 mg
	25708-500	500 mg
G5.5	25709-100	100 mg
	25709-500	500 mg

Ion Exchange Resins & Cartridges

Purolite® Ion Exchange Resins

Absorbents

Specialty adsorbents are solid copolymers with highly porous structures designed to adsorb and desorb a wide variety of complex molecules and structures in a range of environments.

	Catalog #	Size
A149S, Macroporous Strong Acid Cation Exchange Resin **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene **Functional Group**: Complex Amine **Ionic Form as Shipped**: Free Base	50278-1	1 liter
C150H, Macroporous Strong Acid Cation Exchange Resin **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: H^+	50277-1	1 liter
MN102, Macroporous Weak Base Adsorbent **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene **Functional Group**: Tertiary Amine **Ionic Form as Shipped**: FB	50231-250 50231-1	250 ml 1000 ml
MN202, Macroporous Inert Adsorbent **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene	50230-250 50230-1	250 ml 1000 ml
MN500, Hypersol-Macronet Resin **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: H^+	50276-1	1 liter

Chelating Resins

Chelating resins covers lead, copper, zinc, aluminium, cadmium, nickel, cobalt, magnesium, barium, strontium, iron and mercury. The use of chelation resins covers the large industrial uses as well as the small cartridge based units used in spark erosion type services.

S920, Weak Acid Cation Resin, Isothiouronium **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene **Functional Group**: Isothiouronium **Ionic Form as Shipped**: H^+	50232-250 50232-1	250 ml 1000 ml
S924, Weak Acid Cation Resin, Thiol **Polymer Structure**: Macroporous Polystyrene Crosslinked with Divinylbenzene **Functional Group**: Thiol **Ionic Form as Shipped**: H^+	50233-250 50233-1	250 ml 1000 ml
S930Plus, Weak Acid Cation Resin, Iminodiacetic **Polymer Structure**: Macroporous crosslinked polymer **Functional Group**: Iminodiacetic **Ionic Form as Shipped**: Na^+	50234-250 50234-1	250 ml 1000 ml

	Catalog #	Size
S940, Weak Acid Cation Resin, Aminophosphonic **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Aminophosphonic **Ionic Form as Shipped**: Na^+	50235-250 50235-1	250 ml 1000 ml
S950, Weak Acid Cation Resin, Aminophosphonic **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Aminophosphonic **Ionic Form as Shipped**: Na^+	50236-250 50236-1	250 ml 1000 ml
S955, Mixed Acid Cation Resin **Functional Groups**: Diphosphonic, Sulphonic, Carboxylic acid **Ionic Form as shipped**: H^+ or Ca^{2+}/Mg^{2+}	50238-250 50238-1	250 ml 1000 ml
S957, Mixed Acid Cation Resin **Functional Group**: Phosphonic and Sulfonic Acid **Ionic Form as Shipped**: H^+	50237-250 50237-1	250 ml 1000 ml

High Purity Resins

Ion exchange resins for ultra-pure water are specially manufactured to meet the exacting needs of the electronics industry for wafer and microchip production requiring the highest possible water quality (>18.2 MΩ·cm resistivity, with minimum rinse times), while eliminating contamination of the high purity circuits when ion exchange resin is first installed.

UCW1080, Low TOC Boron Selective Weak Base Anion Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: N-methylglucamine **Ionic Form as Shipped**: Free Base	50243-250 50243-1	250 ml 1000 ml
UCW5072, Low TOC Strong Base Anion Resin **Polymer Structure**: Gel polystyrene with divinylbenzene **Functional Group**: Type 1 Quaternary Ammonium **Ionic Form as Shipped**: OH^-	50240-250 50240-1	250 ml 1000 ml
UCW9126, Low TOC Strong Acid Cation Resin **Polymer Structure**: Gel crosslinked polystyrene with divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: H^+	50239-250 50239-1	250 ml 1000 ml
UCW9964, LOW TOC Separable Mixed Bed Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid and Type 1 Quaternary Ammonium **Ionic Form as Shipped**: H^+ / OH^-	50241-250 50241-1	250 ml 1000 ml
UCW9966, Low TOC Non-Separable Mixed Bed Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid and Type 1 Quaternary Ammonium **Ionic Form as Shipped**: H^+ / OH^-	50242-250 50242-1	250 ml 1000 ml

	Catalog #	Size
Inerts		
IP3, Acrylic Polymer for Mixed Bed **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid and Type 1 Quaternary Ammonium **Ionic Form as Shipped**: H^+ / OH^-	50244-250 50244-1	250 ml 1000 ml
Mixed Bed Resins		
Ready to use mixed beds are specially prepared high quality resin mixtures designed for direct purification of water. The ratio of component resins has been specifically tailored to provide high capacity. Performance, of the ready to use mixed bed, will depend on the application. Several of the mixed beds are available with indicators which facilitate ease of operation where a simple visual indication of exhaustion is desired.		
MB3710, Standard Mixed Bed Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid and Type 1 Quaternary Ammonium **Ionic Form as Shipped**: H^+ / OH^-	50227-250 50227-1	250 ml 1000 ml
NRW3240, Low Chloride Nuclear Grade Anion Exchange Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid and Type 1 Quaternary Ammonium **Ionic Form as Shipped**: H^+ / OH^-	50228-250 50228-1	250 ml 1000 ml
UCW3700, Low TOC Mixed Bed **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid and Type 1 Quaternary Ammonium **Ionic Form as Shipped**: H^+ / OH^-	50229-250 50229-1	250 ml 1000 ml
Strong Acid Cation Resins		
These are used in softening and demineralization of water and in other specialist applications. The products offer high physical strength, and efficient operation over a wide range of operating conditions.		
C100, Strong Acid Cation Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: Na^+	50212-250 50212-1	250 ml 1000 ml
C100H, Strong Acid Cation Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: H^+	50213-250 50213-1	250 ml 1000 ml
C100x10H, Strong Acid Cation Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: H^+	50214-250 50214-1	250 ml 1000 ml
C100x16MBH, High Capacity Strong Acid Cation Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic **Ionic Form as Shipped**: H^-	50215-250 50215-1	250 ml 1000 ml

	Catalog #	Size
C160, Macroporous Strong Acid Cation Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Sulfonic Acid **Ionic Form as Shipped**: Na^+	50216-250 50216-1	250 ml 1000 ml

Strong Base Anion Resins

Strong-Base Anion (SBA) exchanger containing Type-II quaternary ammonium groups are used for dealkalization, deionization, demineralization, desilicizers and organic removal. SBA's have excellent operating capacity and good kinetics even when regenerant levels are comparitively low. Specially tailored size grades may be used with excellent results in most of the usual ion-exchange column configurations.

A300, Type II Strong Base Anion Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Type 2 Quaternary Ammonium **Ionic Form as Shipped**: Cl^-	50219-250 50219-1	250 ml 1000 ml
A400, Type 1 Porous Strong Base Anion Resin **Polymer Structure**: Gel polystyrene crosslinked with divinylbenzene **Functional Group**: Type 1 Quaternary Ammonium **Ionic Form as Shipped**: Cl^-	50218-250 50218-1	250 ml 1000 ml
A500, Type 1 Macroporous Strong Base Anion Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Type 1 Quaternary Ammonium **Ionic Form as Shipped**: Cl^-	50222-250 50222-1	250 ml 1000 ml
A510, Type 2 Macroporous Strong Base Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Type 2 Quaternary Ammonium **Ionic Form as Shipped**: Cl^-	50223-250 50223-1	250 ml 1000 ml
A850, Type 1 Acrylic Strong Base Anion Resin **Polymer Structure**: Gel polyacrylic crosslinked with divinylbenzene **Functional Group**: Quaternary Ammonium **Ionic Form as Shipped**: Cl^-	50220-250 50220-1	250 ml 1000 ml
A860, Type 1 Macroporous Acrylic Strong Base Anion Resin **Polymer Structure**: Macroporous polyacrylic crosslinked with divinylbenzene **Functional Group**: Quaternary Ammonium **Ionic Form as Shipped**: Cl^-	50221-250 50221-1	250 ml 1000 ml

Weak Acid Cation Resin

Gel Type Polyacrylic Weak Acid Cation exchanger (WAC). Weak Acid Cation resins are increasingly being used in special applications including treatment of waste water streams in order to reduce environmental pollution.

C104Plus, High Capapcity Weak Acid Cation Resin **Polymer Structure**: Porous crosslinked polyacrylic **Functional Group**: Carboxylic Acid **Ionic Form as Shipped**: H^+	50217-250 50217-1	250 ml 1000 ml

Weak Base Anion Resins

Macroporous weak base anion resins from Purolite have excellent mechanical, osmotic, and chemical stability, combined with the capability of very fast rates of ion exchange, making them particularly suitable for the removal of high molecular weight organic materials from aqueous solutions. The particle size range can also be specially designed to suit continuous process operation, or for operation at higher than average flow rates.

	Catalog #	Size
A100, Weak Base Anion Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Tertiary Amine **Ionic Form as Shipped**: Free Base	50224-250 50224-1	250 ml 1000 ml
A830, High Capacity Weak Base Acrylic Anion Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Complex Amine **Ionic Form as Shipped**: Free Base	50226-250 50226-1	250 ml 1000 ml
A835, Weak Base Anion Exchange Resin **Polymer Structure**: Macroporous polystyrene crosslinked with divinylbenzene **Functional Group**: Tertiary Amine **Ionic Form as Shipped**: Free Base	50274-250 50274-1	250 ml 1 liter
A847, Weak Base Acrylic Anion Resin **Polymer Structure**: Gel polyacrylic crosslinked with divinylbenzene **Functional Group**: Tertiary Amine **Ionic Form as Shipped**: Free Base	50225-250 50225-1	250 ml 1000 ml

Amberlite® Resins

Amberlite® 200 [12626-25-4] *H4g* For separation of rare earths, amino acids. Strong acid (sodium sulfonate), 0.49mm, capacity 1.7 meq/ml (wet). *Amberlite is a registered trademark of Rohm and Haas Co.*	15617-250	250 g
Amberlite® IR-120 Plus [9002-23-7] *H4g* For separation of rare earths, amino acids. Strong acid (sodium sulfonate), 0.5mm, capacity 1.9 meq/ml (wet).	04698-250	250 g
Amberlite® IR-122 For water conditioning. Strong acid (sodium sulfonate), 0.54mm, capacity 2.1 meq/ml (wet).	15626-250	250 g
Amberlite® IRA-458 For water conditioning. Strong base (quaternary ammonium chloride), 0.50mm, capacity 1.25 meq/ml (wet).	15629-250	250 g
Amberlite® IRA-900 For deionization of water and removal of organics. Strong base (quaternary ammonium chloride), 0.53mm, capacity 1.0 meq/ml (wet).	19522-250	250 g

	Catalog #	Size
Amberlite® IRA-93 [9036-92-4] *H2g* For dye waste decolorization, cyanide and silver removal. Weak base (free base), 0.49mm, capacity 1.2 meq/ml (wet).	15622-250	250 g
Amberlite® IRA-958 For removal of color, organics, and cyanide. Strong base (quaternary ammonium chloride), 0.49mm, capacity 0.8 meq/ml (wet).	15621-250	250 g
Amberlite IR-120 For separation of rare earths, amino acids. Strong acid (sodium sulfonate), 0.5mm, capacity 1.9 meq/ml (wet).	04714-250	250 g

Selectacel® Ion Exchange Cellulose Derivatives for Chromatography

Selectacel® ion exchangers are chemical derivatives of cellulose. These ion exchangers have been shown to be particularly effective in the fractionation of a variety of high molecular weight ionic substances including serum proteins, enzymes, and nucleic acids. Their ability to perform these separations is due to their functionality and the highly hydrophilic and porous nature of the cellulose lattice. These ion exchangers possess properties that are not approached by other resin exchangers currently available. Their capacity for proteins is high, and elution may be carried out under mild conditions which prevent denaturation.

Cellulose, carboxymethyl ether (Selectacel® CM, Standard) [9000-11-7] *H2g* **Standard Flow time(sec/10ml)**: 50 - 70, **Specific Volume(ml/g,wet)**: 10 - 14, **Capacity(Meq/g [±.1])**: 0.9	18631-100	100 g
Cellulose, epichlorohydrin/triethanolamine (Selectacel® ECTEOLA, Standard) [9015-13-8] *H2g* **Standard Flow time(sec/10ml)**: 100 - 150, **Specific Volume(ml/g,wet)**: 6 - 7.5, **Capacity(Meq/g [±.1])**: 0.3	18628-100	100 g
Cellulose, phosphate (Selectacel® phosphate) [9015-14-9] *H2g* **Standard Flow time(sec/10ml)**: 280 - 460, **Specific Volume(ml/g,wet)**: 5 - 6.5, **Capacity(Meq/g [±.1])**: 0.9	19792-100	100 g
Cellulose, phosphate (Selectacel® phosphate, standard, Type 40) *H6gh* **Standard Flow time(sec/10ml)**: 80 - 140 **Specific Volume(ml/g,wet)**: 7 - 12, **Capacity(Meq/g [±.1])**: 0.9	19793-100	100 g

Misc./Other

De-Hibit 200 [9003-70-7] *H2g* Resin for removal of phenolic inhibitors (hydroquinone monomethyl ether or t-butylcatechol) from neutral monomers, e.g., Methacrylate esters or styrene derivatives. Suitable for use with Inhibitor Removal Column, *(Cat. #19708)* Technical Data Sheet #256	24013-500	500 g
TMD-8 *A2g* Mixed bed resin (quaternary ammonium hydroxide/sulfonic acid), 16-50 mesh, capacity 0.55meq/ml (wet).	21445-250	250 g

Enzyme Carrier Resins (ECR)

Immobilized enzymes are powerful tools to optimize processes in both operative and economic terms. In addition to a more convenient handling of enzyme preparations, the two main targeted benefits of immobilized enzymes are 1) easy separation of the enzyme from the product, and 2) reuse of the enzyme. Immobilized enzymes allow the easy separation of the catalyst after the reaction e.g. filtration thereby reducing the costs of downstream processing. Moreover, the easy separation of the enzyme from the product simplifies enzyme applications and enables a reliable and efficient reaction technology. On the other hand, the reuse of immobilized enzymes provides cost advantages which are often an essential prerequisite for establishing an enzyme-catalyzed process in the first place. For more details, download the Enzyme Carrier Resins Product Guide from our web site.

Amine Functionalized

Another procedure for covalent immobilization of enzymes is based on the use of amino resins. Amino resins can be pre-activated by glutaraldehyde and then used in the covalent immobilization of enzymes (see Figure 4). Reaction of the aldehyde groups with amino groups of enzymes to form Schiff bases is fast and gives stable multipoint covalent binding. An even more stable linkage can be achieved by reduction with borohydrides.

	Catalog #	Size
ECR8305F, Amino C2 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50257-50 50257-250	50 g 250 g
ECR8305M, Amino C2 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50258-50 50258-250	50 g 250 g
ECR8309F, Amino C2 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50259-50 50259-250	50 g 250 g
ECR8309M, Amino C2 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50260-50 50260-250	50 g 250 g
ECR8404F, Amino C6 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50261-50 50261-250	50 g 250 g
ECR8404M, Amino C6 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50262-50 50262-250	50 g 250 g
ECR8409F, Amino C6 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50263-50 50263-250	50 g 250 g
ECR8409M, Amino C6 Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Amino	50264-50 50264-250	50 g 250 g

Epoxy Functionalized

Epoxy-activated resins are almost ideal matrices to perform easy immobilization of enzymes since they allow multipoint covalent binding between the enzyme and resin.

	Catalog #	Size
ECR8285M, Epoxy Methacrylate/Styrene Enzyme Carrier Resin Polymer Structure: Acrylic/styrene Functional Group: Epoxy	50252-50 50252-250	50 g 250 g
ECR8204F, Epoxy Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Epoxy	50253-50 50253-250	50 g 250 g
ECR8204M, Epoxy Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Epoxy	50254-50 50254-250	50 g 250 g
ECR8209F, Epoxy Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Epoxy	50255-50 50255-250	50 g 250 g
ECR8209M, Epoxy Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Epoxy	50256-50 50256-250	50 g 250 g

Resins for Enzyme Adsorption

This method for the immobilization of enzymes is based on the physical adsorption of enzyme protein on the surface of water-insoluble carriers. The method is very gentle and causes little or no conformational change of the enzyme or destruction of its active center. This method is particularly suitable for applications in organic solvents or hydrophobic media such oils. A major advantage of adsorption as a general method of immobilizing enzymes is that usually no reagents are required.

ECR1090F, Macroporous Styrene Enzyme Carrier Resin Polymer Structure: Styrene	50245-50 50245-250	50 g 250 g
ECR1090M, Macroporous Styrene Enzyme Carrier Resin Polymer Structure: Styrene	50246-50 50246-250	50 g 250 g
ECR1091F, Macroporous Styrene Enzyme Carrier Resin Polymer Structure: Styrene	50247-50 50247-250	50 g 250 g
ECR1091M, Macroporous Styrene Enzyme Carrier Resin Polymer Structure: Styrene	50248-50 50248-250	50 g 250 g
ECR8804F, Octadecyl Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Octadecyl	50265-50 50265-250	50 g 250 g

	Catalog #	Size
ECR8804M, Octadecyl Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Octadecyl	50266-50 50266-250	50 g 250 g
ECR8806F, Octadecyl Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Octadecyl	50267-50 50267-250	50 g 250 g
ECR8806M, Octadecyl Methacrylate Enzyme Carrier Resin Polymer Structure: Acrylic Functional Group: Octadecyl	50268-50 50268-250	50 g 250 g

Enzyme Resin Carrier Kits

Each kit contains 50 g of each Enzyme Resin Carrier

PolyLink Amine Linker Kit - F50 • ECR8310F Amino C2 Methacrylate *(Cat. #50257)* • ECR8319F Amino C2 Methacrylate *(Cat. #50259)* • ECR8405F Amino C6 Methacrylate *(Cat. #50261)* • ECR8417F Amino C6 Methacrylate *(Cat. #50263)*	50269-1	1 kit
PolyLink Amine Linker Kit with Columns and Reagents for Enzyme Immobilization • ECR8310F Amino C2 Methacrylate *(Cat. #50275A)* • ECR8319F Amino C2 Methacrylate *(Cat. #50275B)* • ECR8405F Amino C2 Methacrylate *(Cat. #50275C)* • ECR8417F Amino C2 Methacrylate *(Cat. #50275D)* • Glutaraldehyde 25% in Ampules (10 mL) *(Cat. #01909A)* • Glutaraldehyde 8% in PBS (empty labeled bottle) *(Cat. #19540B)* • Phosphate Buffer saline (225 mL) *(Cat. #19540A*	50275-1	1 kit
PolyLink Enzyme Adsorption Kit - F50 • ECR8804F Octadecyl Methacrylate *(Cat. #50265)* • ECR8806F Octadecyl Methacrylate *(Cat. #50267)* • ECR1090F Macroporous Styrene *(Cat. #50245)* • ECR1091F Macroporous Styrene *(Cat. #50247)*	50271-1	1 kit
PolyLink Enzyme Linker Kit - F50 • ECR8285M Epoxy Methacrylate/Styrene *(Cat. #50252)* • ECR8214F Epoxy Methacrylate *(Cat. #50255)* • ECR8405F Amino C6 Methacrylate *(Cat. #50261)* • ECR8804F Octadecyl Methacrylate *(Cat. #50265)* • ECR1090F Macroporous Styrene *(Cat. #50245)*	50273-1	1 kit
PolyLink Epoxy Linker Kit - F50 • ECR8205 Epoxy Methacrylate *(Cat. #50253)* • ECR8214 Epoxy Methacrylate *(Cat. #50255)* • ECR8285M Epoxy Methacrylate/Styrene *(Cat. #50252)*	50270-1	1 kit

	Catalog #	Size
PolyLink Epoxy Linker Kit with Columns and Reagents for Enzyme Immobilization . . . • ECR8205F Epoxy Methacrylate *(Cat. #50279A)* • ECR8214F Epoxy Methacrylate *(Cat. #50279B)* • ECR8204F Epoxy Methacrylate *(Cat. #50279C)* • Phosphate buffered saline (225 mL) *(Cat. #01954A)* • Phosphate buffered solution pH 8, 1.0 M (200 mL) *(Cat. #50279D)*	50279-1	1 kit
PolyLink Lipase Linker Kit - F50 . . . . . . • ECR8285M Epoxy Methacrylate/Styrene *(Cat. #50252)* • ECR8804F Octadecyl Methacrylate *(Cat. #50265)* • ECR8806F Octadecyl Methacrylate *(Cat. #50267)* • ECR1090F Macroporous Styrene *(Cat. #50245)*	50272-1	1 kit

Ion Exchange Resin Cartridges

High quality of cartridge components and precision manufacturing techniques, allow us to provide you with the highest quality, best performing Ion Exchange Resin Cartridges. We offer cartridges in many configurations such as Barnstead, Millipore, and US Filter to fit most popular ultra-pure water systems.

Purolite® Ion Exchange Resin Cartridges are made from virgin polypropylene, using the latest heat welding techniques without using any chemical bonding agents. Assembly is performed under clean manufacturing conditions using proven statistical Process Control to ensure product quality. Model and lot numbers are heat stamped into each cartridge to provide traceability without the concern of possible contamination from ink or labels. For more details on Ion Exchange Resin Cartridges, please visit our web site and download the Product Guide available at: www.polysciences/cartridges.

Ametek - SlimLine Style Cartridges

Length: 9.8125" (24.9 cm) **Diameter**: 2.923" (7.42 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-2010 Cartridge . . . . . . **Style**: Cartridge - Ametek/Continental **Replaces**: Continental Model DISB 1000-4	50146-1 50146-4	1 Unit 4 Pack
PCL-2011 Cartridge . . . . . . **Style**: Cartridge - Ametek/Continental **Replaces**: Continental /Ametek Model DIMN 1000-4 / PCF1-10MB	50148-1 50148-4	1 Unit 4 Pack
PCL-2013 Cartridge . . . . . . **Style**: Cartridge - Ametek/Continental **Replaces**: Continental /Ametek Model DIMN 1000-4 / PCF1-10MB	50150-1 50150-4	1 Unit 4 Pack
PCL-2015 Cartridge . . . . . . **Replaces**: Continental Model DIOR 1000-4	50151-1 50151-4	1 Unit 4 Pack
PCL-2019 Cartridge . . . . . . **Replaces**: Continental 10" Mixed Bed Oxygen Removal	50152-4	4 Pack

	Catalog #	Size
PCL-2022 Cartridge **Replaces**: Continental Model DIMS 1000	50154-1	1 Unit
PCL-2023 Cartridge **Replaces**: Continental 10" Oxygen / Organic Removal	50155-4	4 Pack

Ametek/Continental - 10" Big Blue Style Cartridges

Length: 9.8" (24.9 cm) **Diameter**: 4.5" (11.43 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-2211 Cartridge **Replaces**: Continental 10" Big Blue Mixed Bed	50168-1 50168-2	1 Unit 2 Pack
PCL-2213 Cartridge **Replaces**: Continental 10" Big Blue Carbon	50169-1 50169-2	1 Unit 2 Pack
PCL-2215 Cartridge **Replaces**: Continental 10" Big Blue Organic Scavenger	50170-1 50170-2	1 Unit 2 Pack

Ametek/Continental - 20" Big Blue Style Cartridges

Length: 20" (50.8 cm) **Diameter**: 4.5" (11.43 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-2311 Cartridge **Replaces**: Ametek Model BBF1-20MB	50171-1	1 Unit
PCL-2313 Cartridge **Replaces**: Continental 20" Big Blue Carbon	50172-1	1 Unit
PCL-2315 Cartridge **Replaces**: Continental 20" Big Blue Organic Scavenger	50173-1	1 Unit
PCL-2316 Cartridge **Replaces**: Continental 20" Big Blue High Temperature Mixed	50174-1	1 Unit
PCL-2318 Cartridge **Replaces**: Continental 20" Big Blue Anion Regenerated	50175-1	1 Unit
PCL-2340 Cartridge **Replaces**: Continental 20" Big Blue Boron Removal	50176-1	1 Unit
PCL-2511 Cartridge **Replaces**: Continental 20" Big Blue Iodine Resin Cartridge	50178-1	1 Unit

Ametek/Continental - Misc. Cartridges

	Catalog #	Size
PCL-2010 U Cartridge **Style**: Cartridge - Big Blue - Ametek **Replaces**: Continental 10" Seperate Bed Upflow	50147-4	4 Pack
PCL-2011 THD Cartridge **Replaces**: Continental 10" Mixed Bed Threaded	50149-4	4 Pack
PCL-2020 S Cartridge **Style**: Cartridge - Big Blue - Ametek **Replaces**: Continental 10" Cartridge (single) Oxygen Removal	50153-1	1 Pack
PCL-2024 S Cartridge **Style**: Cartridge - Big Blue - Ametek **Replaces**: Continental 10" MN-500	50156-1	1 Unit
PCL-2110 U Cartridge **Replaces**: Continental 20" Seperate Bed Upflow	50158-1 50158-2	1 Unit 2 Pack
PCL-2111 THD Cartridge **Replaces**: Continental 20" Mixed Bed Threaded	50160-1 50160-2	1 Unit 2 Pack
PCL-2411 Cartridge **Style**: Cartridge - Big Blue - Ametek **Replaces**: Continental 5" Ultra Pure Mixed Bed	50177-4	4 Pack

Ametek/Continental - SlimLine Style Cartridges

Length: 20" (50.8 cm) **Diameter**: 2.923" (7.42 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-2110 Cartridge **Style**: Cartridge - Ametek/Continental **Replaces**: Continental Model DISB 2000-2	50157-1 50157-2	1 Unit 2 Pack
PCL-2111 Cartridge **Style**: Cartridge - Ametek/Continental **Replaces**: Continental/Ametek Model DIMN 2000-2 / PCF-20MB	50159-1 50159-2	1 Unit 2 Pack
PCL-2113 Cartridge **Style**: Cartridge - Ametek/Continental **Replaces**: Continental Model DICR 2000-2	50161-1 50161-2	1 Unit 2 Pack
PCL-2115 Cartridge **Replaces**: Continental Model DIOR 2000-2	50162-1 50162-2	1 Unit 2 Pack

	Catalog #	Size
PCL-2119 Cartridge **Replaces**: Continental 20" Seperate Bed	50163-1 50163-2	1 Unit 2 Pack
PCL-2120 Cartridge **Style**: Cartridge - Ametek/Continental **Replaces**: Continental 20" Oxygen Removal	50164-2	2 Pack
PCL-2121 Cartridge **Style**: Cartridge - Ametek/Continental **Replaces**: Continental 20" Cation Regenerated	50165-2	2 Pack
PCL-2124 Cartridge **Style**: Cartridge - Ametek/Continental **Replaces**: Continental 20" MN-500	50166-1	1 Unit
PCL-2131 Cartridge **Replaces**: Continental 20" Anion Regenerated	50167-2	2 Pack

Barnstead - Final Filtration Cartridges

Inlet: 0.25" NPT **Outlet**: Variable Hose Barb **Maximum Flow Rate**: 2 liters/min
Maximum Inlet Pressure: 50 PSI

PCL-1450 Cartridge **Replaces**: Barnstead Model D3750	50128-1	1 Unit

Barnstead - Hose Barb Style Cartridges

Length: 18.7" (47.5 cm) **Diameter**: 3.4" (8.6 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-11-A860Cl Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Tannin Removal	50124-1	1 Unit
PCL-11-S920 Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Chelating	50125-1	1 Unit
PCL-1110D Cartridge **Replaces**: Barnstead Model D8901	50114-1	1 Unit
PCL-1111 Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Model D8911	50115-1	1 Unit
PCL-1111D Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Model D8902	50116-1	1 Unit

	Catalog #	Size
PCL-1112 Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Model D8903	50117-1	1 Unit
PCL-1113 Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Model D8904	50118-1	1 Unit
PCL-1114D Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Model D8905	50119-1	1 Unit
PCL-1116D Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Model D8921	50120-1	1 Unit
PCL-1117D Cartridge **Replaces**: Barnstead Model D8922	50121-1	1 Unit
PCL-1121 Cartridge **Style**: Hose Barb Cartridge **Replaces**: Barnstead Anion Removal	50122-1	1 Unit
PCL-1310D Cartridge **Replaces**: Barnstead Model D8950	50126-1	1 Unit
PCL-1317D Cartridge **Replaces**: Barnstead Model D8951	50127-1	1 Unit
PCL-1919 Cartridge **Replaces**: Barnstead Model D8822	50145-1	1 Unit

Barnstead - PCS-Style Cartridges

Length: 17.2" (43.7 cm) **Diameter**: 3.4" (8.6 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-1010 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0803	50100-1	1 Unit
PCL-1011 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0809, D5027	50101-1	1 Unit
PCL-1012 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0811	50102-1	1 Unit

	Catalog #	Size
PCL-1013 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0813	50103-1	1 Unit
PCL-1014 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0815	50104-1	1 Unit
PCL-1015 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0820	50105-1	1 Unit
PCL-1016 Cartridge **Replaces**: Barnstead Model D0832	50106-1	1Unit
PCL-1017 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0835	50107-1	1 Unit
PCL-1018 Cartridge **Replaces**: Barnstead Model D0836	50108-1	1 Unit
PCL-1019 Cartridge **Replaces**: Barnstead Model D8809	50109-1	1 Unit
PCL-1020 Cartridge **Replaces**: Barnstead Model D08811	50110-1	1 Unit
PCL-1021 Cartridge **Style**: PCS Cartridge **Replaces**: Barnstead Model D0760	50111-1	1 Unit
PCL-1022 Cartridge **Replaces**: Barnstead Model D5021	50112-1	1 Unit

Barnstead Kits

PCL-1530 Cartridge **Style**: Kit-Barnstead **Replaces**: Barnstead Model D5029	50129-1	1 Unit
PCL-1531 Cartridge **Replaces**: Barnstead Model D5022	50130-1	1 Unit
PCL-1532 Cartridge **Style**: Kit-Barnstead **Replaces**: Barnstead Model D5028	50131-1	1 Unit

	Catalog #	Size
PCL-1533 Cartridge **Replaces**: Barnstead Model D5023	50132-1	1 Unit
PCL-1534 Cartridge **Replaces**: Barnstead Model D50227	50133-1	1 Unit
PCL-1535 Cartridge **Replaces**: Barnstead Model D50228	50134-1	1 Unit
PCL-1630 Cartridge **Replaces**: Barnstead Model D3805	50135-1	1 Unit
PCL-1631 Cartridge **Replaces**: Barnstead Model D3806	50136-1	1 Unit
PCL-1632 Cartridge **Replaces**: Barnstead Model D3804	50137-1	1 Unit
PCL-1633 Cartridge **Replaces**: Barnstead Model D3807	50138-1	1 Unit
PCL-1732 Cartridge **Replaces**: Barnstead Model D4801	50139-1	1 Unit
PCL-1733 Cartridge **Replaces**: Barnstead Model D4802	50140-1	1 Unit
PCL-1734 Cartridge **Style**: Kit-Barnstead **Replaces**: Barnstead Model D5025	50141-1	1 Unit
PCL-1735 Cartridge **Style**: Kit-Barnstead **Replaces**: Barnstead Model D5026	50142-1	1 Unit

Hose Barb Style Cartridges - Custom

PCL-1124 Cartridge **Style**: Hose Barb Cartridge **Replaces**: No Equivalent Model	50123-1	1 Unit
PCL-1911 Cartridge **Replaces**: No Equivalent Model	50143-1	1 Unit
PCL-1913 Cartridge **Style**: Hose Barb Cartridge **Replaces**: No Equivalent Model	50144-1	1 Unit

Millipore® - Misc. Cartridges

	Catalog #	Size
PCL-5011 L Cartridge **Cartridge type**: Milli-Q Ultra Pure Mixed Bed	50180-1	1 Unit
PCL-6225 Cartridge **Replaces**: Millipore Model PROG000S1	50206-1	1 Unit
PCL-6215 Cartridge **Replaces**: Millipore Model PROG000S2	50207-1	1 Unit

Millipore® Double Open-end Cartridge with Single 222 O-Rings

Length: 17.2" (43.7 cm) **Diameter**: 3.4" (8.6 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-5111 Cartridge **Style**: Millipore **Replaces**: Millipore Model CDMB 022 02	50183-1	1 Unit
PCL-5113 Cartridge **Style**: Millipore **Replaces**: Millipore Model CDFC 022 03	50184-1	1 Unit
PCL-5116 Cartridge **Style**: Millipore **Replaces**: Millipore Model CDEX 022 01	50185-1	1 Unit
PCL-5119 Cartridge **Style**: Millipore	50186-1	1 Unit

Millipore® Double Open-end Cartridge with Double 222 O-Rings

Length: 17.2" (43.7 cm) **Diameter**: 3.4" (8.6 cm) **Maximum Differential Pressure**: 60 psi
Recommended Storage Temperature: 0° – 35° C

PCL-5011 Cartridge **Style**: Millipore **Replaces**: Millipore Model CPMB 012 02	50179-1	1 Unit
PCL-5013 Cartridge **Style**: Millipore **Replaces**: Millipore Model CDFC 012 04	50181-1	1 Unit
PCL-5016 Cartridge **Style**: Millipore **Replaces**: Millipore Model CDEX 012 01	50182-1	1 Unit

	Catalog #	Size
Millipore® Filters		
PCL-5060 Cartridge **Style**: Filter-Millipore **Replaces**: Millipore Model CWSC 01T P3	50187-1	1 Unit
PCL-5061 Cartridge **Style**: Filter-Millipore **Replaces**: Millipore Model MPGL-04S K2	50188-1	1 Unit
Millipore® Kits		
PCL-5536 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CDMF 012 04	50195-1	1 Unit
PCL-5537 Cartridge **Replaces**: Millipore Model CDMF 012 05	50196-1	1 Unit
PCL-5538 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CDOF 012 05	50197-1	1 Unit
PCL-6120 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QGARDD00R1	50202-1	1 Unit
PCL-6110 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QGARDD00D2	50201-1	1 Unit
PCL-6130 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QGARD0OVX	50203-1	1 Unit
PCL-6220 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model PROG00001	50205-1	1 Unit
PCL-6210 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model PROG00002	50204-1	1 Unit
PCL-6310 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QTUMOOEX	50208-1	1 Unit
PCL-6320 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QTUM00OIX	50209-1	1 Unit

	Catalog #	Size
PCL-6330 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QTUM00OVX	50210-1	1 Unit
PCL-6340 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model QTUM00ICP	50211-1	1 Unit

Millipore® QPAK System Cartridges

Maximum Differential Pressure: 60 PSI **Recommended Storage Temperature**: 0° – 35° C

PCL-5450 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CPMQ 004 R1	50189-1	1 Unit
PCL-5451 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CPMQ K05 R1	50190-1	1 Unit
PCL-5452 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model DPMQ 004 D2	50191-1	1 Unit
PCL-5453 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CPMQ K05 D2	50192-1	1 Unit
PCL-5454 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CPRO P04 02	50193-1	1 Unit
PCL-5455 Cartridge **Style**: Kit-Millipore **Replaces**: Millipore Model CP4A LLR ES	50194-1	1 Unit

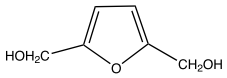
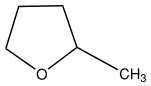
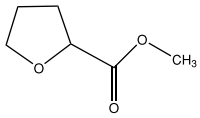
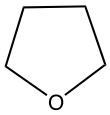
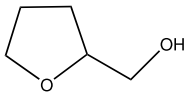
PCS Style Cartridges - Custom

PCL-1023 Cartridge **Style**: PCS Cartridge **Replaces**: No Equivalent Model	50113-1	1 Unit

Organic Intermediates & Specialties

Furan Based Organic Blocks

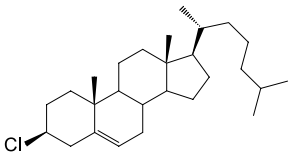
Furan based synthons are finding new uses in organic and polymer synthesis applications including the pharmaceutical, flavors & fragrances, graphic arts and organic intermediate industries.

	Catalog #	Size
Bis-(hydroxymethyl) Furan [1883-75-6] *U4d* $C_6H_8O_3$ 2,5 Position Disubstituted Furan. **Application**: Specialty Diol 	24723-10	10 g
2-Methyl Tetrahydrofuran [96-47-9] *CH4g* MW 86.13 mp -136°C bp 80°C -11.1 Solubility in water w(g/100 g at 25°C): 13. TSCA $C_5H_{10}O$ 2 Position Substituted Furan. **Applications**: Grignard Solvent, Organometallic Chemistry, Extraction Solvent, Dichloromethane replacement solvent. 	24707-1000	100 g
2-Methyl Tetrahydrofuroate [37443-42-8] *EH4g* bp 76°C (169°F) 64°C (147°F) Soluble in water (g/100 g at 25°C): miscible. $C_6H_{10}O_3$ 2 Position Substituted Furan. **Applications**: Synthetic intermediate for pharmaceuticals. 	24726-25	25 g
Tetrahydrofuran [109-99-9] *CH4g* MW 72.11 mp -108°C bp 65-67°C d 0.889 g/ml Appearance: liquid C_4H_8O 	24752-500	500 g
Tetrahydrofurfuryl Alcohol [97-99-4] *EH4g* MW 102.13 mp -80°C bp 178°C 183°F Soluble in water (g/100 g at 20°C): miscible. TSCA $C_5H_{10}O_2$ **Applications**: Agricultural "green" solvent or adjuvant, Electronics Cleaner, Printing inks, Reactive diluent for epoxy resins, Industrial Cleaner/Paint Stripper, Pharmaceutical intermediate. 	24714-250	250 g

Organic Specialties - Liquid Crystals

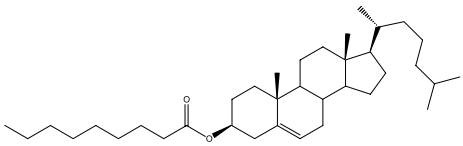
Organic compounds that are capable of responding to small amounts of radiant energy and undergo a phase transition with selective reflection of light. Specific colors are obtained depending on the wavelength of light which is determined by the organic crystal array "pitch length." Pitch lengths will vary considerably depending on temperature and the reflected light will also therefore depend on temperature. Application areas range from thermally activated displays to sensors and detection devices to cosmetics.

	Catalog #	Size
Cholesteryl Chloride [910-31-6] *HU4g* (3β-chloro-5-cholestene) Appearance: White Solid **Applications**: Thermally Activated Displays, Sensors and Detection Devices, Cosmetics.	24814-50	50 g



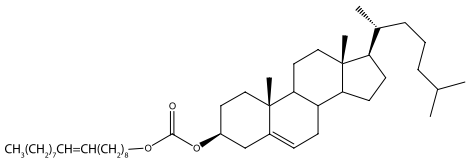
Transition Temperature:
- Crystal - isotropic state at 96-98° C
- On cooling isotropic - cholesteric at 95° C
- Cholesteric - crystal 64° C

Cholesteryl Nonanoate [1182-66-7] *HU4g* (5-cholestene-3β-ol nonanoate) Appearance: White, free flowing powder **Applications**: Thermally Activated Displays, Sensors and Detection Devices, Cosmetics.	24817-50	50 g



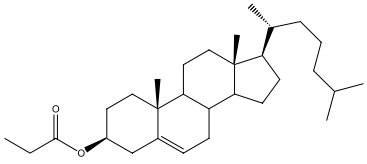
Transition Temperature:
- Crystal - smectic at 77.5° C
- Smectic - cholesteric 79° C
- Cholesteric - isotropic 90° C

Cholesteryl Oleyl Carbonate [17110-51-9] *HU4g* (3-cholestene-3β-ol oleyl carbonate) Appearance: Hazy semi-solid to viscous liquid **Applications**: Thermally Activated Displays, Sensors and Detection Devices, Cosmetics.	24815-50	50 g



Transition Temperature:
- Crystal - isotropic state at 20° C
- On cholesteric - isotropic at 40° C
- Normally in smectic phase but will slowly crystallize to a solid.

Cholesteryl Propionate [633-31-8] *HU4g* (5-cholestene-3β-ol propionate) Appearance: White, free flowing powder **Applications**: Thermally Activated Displays, Sensors and Detection Devices, Cosmetics.	24816-50	50 g

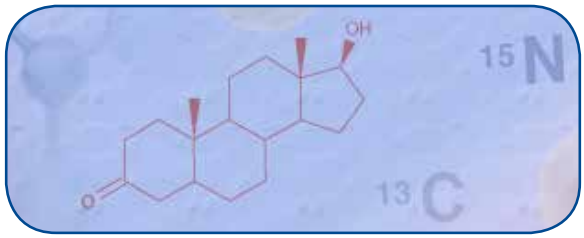


Transition Temperature:
- Crystal - cholesteric state at 96° C
- Cholesteric - isotropic 112° C

Stable Isotope Labeled Compounds

Polysciences provides over 200 stable isotope labeled compounds for use as mass spectroscopy internal standards and for obtaining clearer results when analyzing NMR samples including:

- Final Drug Substances and Intermediates
- Vitamin Standards
- Steroid Standards
- Caffeine and Xanthine Standards
- Environmental Standards
- Biological Standards
- Standards and Precursors for PET
- Custom Synthesis

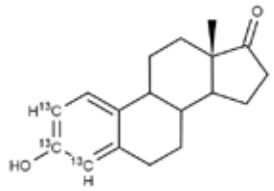


This catalog includes many hard to find stable isotope labeled compounds useful for both the research and analysis communities. Many of these compounds can also be provided in larger quantities than those listed in the catalog, so please inquire for pricing and availability. We can also provide custom synthesized, labeled versions of nearly any compound that you may need as well as custom versions of our catalog compounds with different substitution patterns or additional labeled atoms.

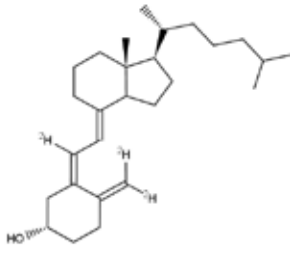
For convenience many of our more popular compounds are also available as exact concentration solutions. These **[Exact]² Solutions™** with both exact known mass and concentration provide the most convenient method to quickly add a known amount of internal standard to your samples prior to analysis.

[Exact]² Solutions™ Reference Standard Solutions

- Exact mass Vitamin & Steroid solutions available
- Exact concentration determined for each lot
- Ready to use 1 mL solutions in sealed ampules
  - No need to weigh samples
  - No need to dilute solutions
- Increased vitamin stability
- Lower cost
- Less waste



25226
Estrone-[2,3,4-$^{13}C_3$]



25124
Vitamin-D3-[$^2H_3$]

Stable Isotope Compounds

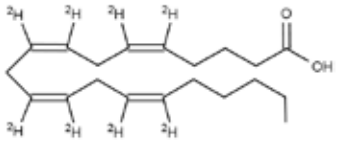
We provide over 200 stable isotope labeled compounds for use as mass spectroscopy internal standards and for obtaining clearer results when analyzing NMR samples, including many hard to find stable isotope labeled compounds useful for both research and analytical communities. Many of these compounds can also be provided in larger quantities than those listed in the catalog. Please inquire for pricing and availability. We can also provide custom synthesized, labeled versions of nearly any compound that you may need as well as custom versions of our catalog compounds with different substitution patterns or additional labeled atoms. Where applicable labeled and unlabeled CAS numbers are provided. **All stable isotopes require overnight shipping methods.**

	Catalog #	Size
2-Flouro-5-iodoaniline-[13C6] [886362-82-9] *af* MW 242.96941 C_6H_5FIN **Isotopic Incorporation**: >99% 13C **Purity**: ≥98% **Shipping**: Overnight	25232-1	1 g
3-Nitroaniline-[13C6] [1261170-88-0; unlabeled: 99-09-2] *af* MW 144.08 $C_6HN_2O_{2</sub}$ **Isotopic Incorporation**: 99% 13C **Purity**: ≥95% **Shipping**: Overnight	25279-1	1 g
4-Flouriodobenzene-[13C6] [352-34-1] *af* MW 227.95476 C_6H_4FI **Isotopic Incorporation**: >99% 13C **Purity**: ≥98% **Shipping**: Overnight	25233-1	1 g
5-Acetylamino-6-amino-3-methyluracil-[13C4,15N3] [1173022-65-5; unlabeled: 19893-78-8] *A2af* MW 205.13 $C_7H_{10}N_4O_3$ **Isotopic Incorporation**: 99% 13C; 98% 15N (M+6.95) Purity: ≥98%	25129-1 25129-2 25129-5	1 mg 2 mg 5 mg

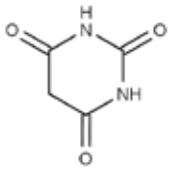
	Catalog #	Size
Aldicarb-[13C3,2H3] [1261170-75-5; unlabeled: 116-06-3] *HPS3af*	25130-1	1 mg
MW 195.2669	25130-5	5 mg
$C_7H_{14}N_2O_2S$	25130-10	10 mg
Isotopic Incorporation: 99% 13C; 98% 2H. Purity: ≥98%	25130-25	25 mg
Aldicarb sulfone-[13C3,2H3] [1261170-76-6; unlabeled:1646-88-4] *PSW3af*	25131-1	1 mg
MW 227.26	25131-5	5 mg
$C_7H_{14}N_2O_4S$	25131-10	10 mg
Isotopic Incorporation: 99% 13C; 98% 2H Purity: ≥98%	25131-25	25 mg
Aldicarb sulfoxide-[13C3,2H3] [1261170-77-7; unlabeled: 1646-87-3] *PSW3af*	25132-1	1 mg
MW 211.266	25132-5	5 mg
$C_7H_{14}N_2O_3S$	25132-10	10 mg
Isotopic Incorporation: 99% 13C; 98% 2H Purity: ≥98%	25132-25	25 mg
Aldosterone [52-39-1] *HM3af*	25134-1	1 mg
MW 360.444	25134-5	5 mg
$C_{21}H_{28}O_5$		
Purity: ≥95%		
Aldosterone-[2,2,4,6,6,17,21,21-2H8] [1261254-31-2; unlabeled: 52-39-1] *HM3af*	25133-1	1 mg
MW 368.4932	25133-2	2 mg
$C_{21}H_{28}O_5$	25133-5	5 mg
Isotopic Incorporation: ≥6 D/molecule. Purity: ≥98%	25133-10	10 mg
Arachidonic acid [506-32-1] *HK3abf*	25140-1	1 mg
MW 304.4668	25140-5	5 mg
$C_{20}H_{32}O_2$	25140-10	10 mg
Purity: >95%		

	Catalog #	Size
Arachidonic acid-[5,6,8,9,11,12,14,15-2H8] [69254-37-1; unlabeled: 506-32-1] *HK3abf*	25139-5	1 mg
	25139-10	10 mg
	25139-50	50 mg
	25139-100	100 mg
Barbituric Acid [67-52-7] *H3af*	25142-1	1 g
	25142-5	5 mg
	25142-10	10 mg
Barbituric Acid-[13C4,15N2] [1173019-05-0; unlabeled: 67-52-7] *H3af*	25141-5	5 mg
	25141-10	10 mg
Biotin [58-85-5] *H3af*	25145-1	1 mg
	25145-5	5 mg
Biotin-[2H2] [1217481-41-8; unlabeled: 58-85-5] *H3af*	25143-5	5 mg
	25143-10	10 mg
	25143-20	20 mg
Biotin-[2H2]; ethanol solution (1mL) [1217481-41-8; unlabeled: 58-85-5] *CH5af*	25146-0.05	50 µg/ml
	25146-0.1	100 µg/ml

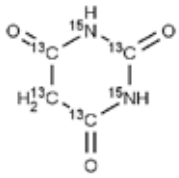
Arachidonic acid-[5,6,8,9,11,12,14,15-2H8] [69254-37-1; unlabeled: 506-32-1] *HK3abf*
MW 312.516
$C_{20}H_{32}O_2$
Isotopic Incorporation: 7.45 D/molecule; >99% isotopic distribution between D5 and D10. Purity: ≥98%



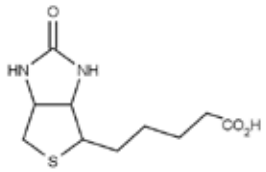
Barbituric Acid [67-52-7] *H3af*
MW 128.086
$C_4H_4N_2O_3$
Purity: ≥98%



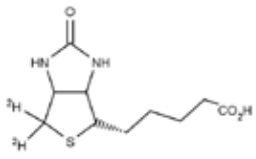
Barbituric Acid-[13C4,15N2] [1173019-05-0; unlabeled: 67-52-7] *H3af*
MW 134.04
$C_4H_4N_2O_3$
Isotopic Incorporation: 99% 13C; 98% 15N. Purity: ≥97%



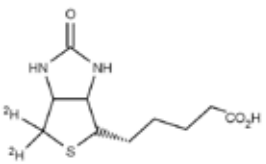
Biotin [58-85-5] *H3af*
MW 244.31
$C_{10}H_{16}N_2O_3S$
Purity: ≥98%



Biotin-[2H2] [1217481-41-8; unlabeled: 58-85-5] *H3af*
MW 246.32
$C_{10}H_{16}N_2O_3S$
Isotopic Incorporation: ≥98% 2H. Purity: ≥97%



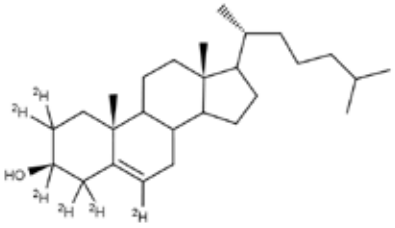
Biotin-[2H2]; ethanol solution (1mL) [1217481-41-8; unlabeled: 58-85-5] *CH5af*
MW 246.323
$C_{10}H_{16}N_2O_3S$
Isotopic Incorporation: ≥98% 2H. Purity: ≥97%



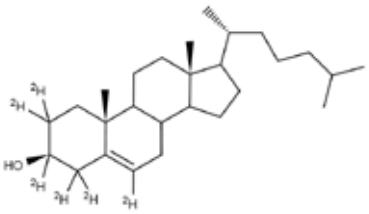
	Catalog #	Size
Biotin-[2H8] [1261170-78-8; unlabeled: 58-85-5] *H3af* MW 252.36 $C_{10}H_{16}N_2O_3S$ **Isotopic Incorporation**: ≥99% 2H. Purity: ≥98%	25144-1 25144-5	1 mg 5 mg
Biotin; ethanol solution (1mL) [58-85-5] *CH5af* MW 244.311 $C_{10}H_{16}N_2O_3S$ Purity: ≥98%	25148-0.05 25148-0.1	50 µg/ml 100 µg/ml
Z-1-Bromoheneicosa-3,6,9,12,15,18-hexaene [147544-57-8] *A3af* MW 363.375 $C_{21}H_{31}Br$ Purity: ≥95% (major contaminant is 1-chloro)	25153-1 25153-2	1 g 2 g
Z-1-Bromononadeca-4,7,10,13-tetraene [117567-53-0] *A3af* MW 339.3529 $C_{19}H_{31}Br$ Purity: ≥95% (major contaminant is 1-chloro)	25156-1 25156-2	1 g 2 g
(+/-)-Catechin-[13C3] [1261254-33-4; unlabeled: 7295-85-4] *H3af* MW 293.246 $C_{15}H_{14}O_6$ **Isotopic Incorporation**: >99% 13C Purity: ≥98%	25157-1 25157-5	1 mg 5 mg
Cholesterol [57-88-5] *H3af* MW 386.6535 $C_{27}H_{46}O$ Purity: ≥98%	25159-1 25159-5 25159-10	1 mg 5 mg 10 mg

	Catalog #	Size
Cholesterol-[2,2,3,4,4,6-2H6] [92543-08-3 Unlabeled: 57-88-5] *H3af*	25158-25	25 mg
	25158-50	50 mg
	25158-100	100 mg
	25158-500	500 mg
Cholesterol-[2,2,3,4,4,6-2H6]; chloroform solution (1 mL) [92543-07-2; unlabeled: 57-88-5] *C3af*	25160-0.1	100 µg/ml
	25160-1	1 mg/ml
Cholesterol; chloroform solution (1 mL) [57-88-5] *C3af*	25161-0.1	100 µg/ml
	25161-1	1 mg/ml
Choline-1,1,2,2-d4 bromide [1927-06-6]	25384-100	100 mg
	25384-500	500 mg
Cortisol [50-23-7] *H3af*	25166-1	1 mg
	25166-5	5 mg
	25166-10	10 mg
Cortisol-[2H4] [73565-87-4; unlabeled: 50-23-7] *H3af*	25165-5	5 mg
	25165-10	10 mg

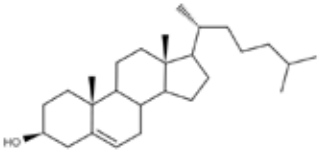
MW 392.6904
$C_{27}H_{46}O$
Isotopic Incorporation: >99% 2H Purity: ≥98%



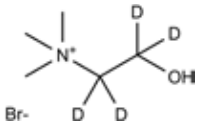
MW 392.69049
$C_{27}H_{46}O$
Isotopic Incorporation: >99% 2H Purity: ≥98%



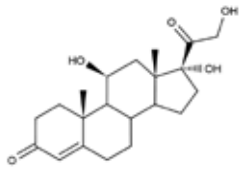
MW 386.6535
$C_{27}H_{46}O$
Purity: ≥98%



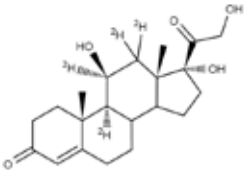
MW 188.1 Appearance: Solid
$C_5H_{10}D_4BrNO$



MW 362.4598
$C_{21}H_{30}O_5$
Purity: ≥98%

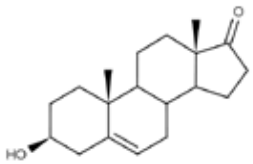


MW 366.4844
$C_{21}H_{30}O_5$
Isotopic Incorporation: 98% 2H Purity: ≥98%

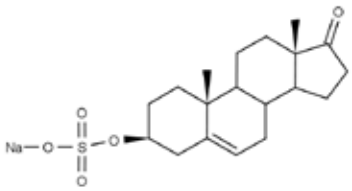


	Catalog #	Size
Cortisol-[2H4]; methanol solution (1 mL) [73565-87-4; unlabeled: 50-23-7] *CHP7af*	25167-0.1	100 µg/ml
	25167-1	1 mg/ml
MW 366.4845 $C_{21}H_{30}O_5$ Isotopic Incorporation: 98% 2H Purity: ≥98%		
Cortisol; methanol solution (1 mL) [50-23-7] *CHP7af*	25168-0.1	100 µg/ml
	25168-1	1 mg/ml
MW 362.4599 $C_{21}H_{30}O_5$ Purity: ≥98%		
Cortisone [53-06-5] *H3af*	25170-1	1 mg
	25170-5	5 mg
	25170-10	10 mg
MW 360.444 $C_{21}H_{28}O_5$ Purity: ≥98%		
Cortisone-[2H7] [1261254-36-7; unlabeled:53-06-5] *H3af*	25169-1	1 mg
	25169-5	5 mg
	25169-10	10 mg
MW 367.4872 $C_{21}H_{28}O_5$ Isotopic Incorporation: 98% 2H Purity: ≥98%		
m-Coumaric acid-[13C3] [1261170-79-9] *H3af*	25171-1	1 mg
	25171-5	5 mg
MW 167.136 $C_9H_8O_3$ Isotopic Incorporation: >99% 13C Purity: >98%		
p-Coumaric acid-[13C3] [1261170-80-2; unlabeled:501-98-4] *H3af*	25172-1	1 mg
	25172-5	5 mg
MW 167.136 $C_9H_8O_3$ Isotopic Incorporation: >99% 13C Purity: >98%		

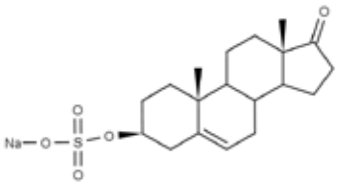
	Catalog #	Size
Dehydroepiandrosterone [53-43-0] *H3af*	25174-1	1 mg
MW 288.4244	25174-5	5 mg
$C_{19}H_{28}O_2$	25174-10	10 mg
Purity: ≥98%		



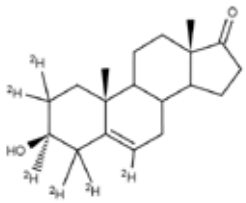
Dehydroepiandrosterone sulfate sodium salt [78590-17-7]	25178-1	1 mg
MW 390.4689	25178-5	5 mg
$C_{19}H_{27}NaO_5S$	25178-10	10 mg
Purity: ≥98%		



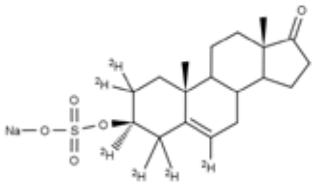
Dehydroepiandrosterone sulfate sodium salt; methanol solution (1mL) [78590-17-7] *CH6g*	25180-0.1	100 µg/ml
MW 390.46899	25180-1	1 mg/ml
$C_{19}H_{27}NaO_5S$		
Purity: ≥98%		



Dehydroepiandrosterone-[2H6] [1261254-39-0; unlabeled: 53-43-0] *H3af*	25173-5	5 mg
MW 294.4613	25173-10	10 mg
$C_{19}H_{28}O_2$		
Isotopic Incorporation: 97% 2H Purity: ≥98%		



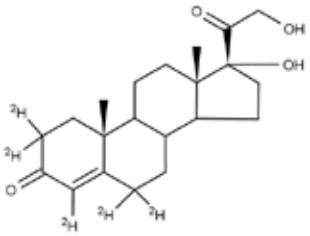
Dehydroepiandrosterone-[2H6] sulfate sodium salt [1261254-41-4] *A3af*	25177-1	1 mg
MW 396.506	25177-5	5 mg
$C_{19}H_{27}NaO_5S$	25177-10	10 mg
Isotopic Incorporation: 97% 2H Purity: ≥98%		



	Catalog #	Size
Dehydroepiandrosterone-[2H6] sulfate sodium salt; methanol solution (1mL) [1261254-41-4; unlabeled: 78590-17-7] *CH6g* MW 396.50601 $C_{19}H_{27}NaO_5S$ **Isotopic Incorporation**: 97% 2H Purity: ≥98%	25179-0.1 25179-1	100 µg/ml 1 mg/ml
Dehydroepiandrosterone-[2H6]; methanol solution (1mL) [1261170-80-2; unlabeled: 53-43-0] *CH6af* MW 294.4614 $C_{19}H_{28}O_2$ **Isotopic Incorporation**: 97% 2H Purity: ≥98%	25175-0.1 25175-1	100 µg/ml 1 mg/ml
Dehydroepiandrosterone; methanol solution (1mL) [53-43-0] *CH6af* MW 288.42441 $C_{19}H_{28}O_2$ Purity: ≥98%	25176-0.1 25176-1	100 µg/ml 1 mg/ml
11-Deoxycortisol [152-58-9] MW 346.4605 $C_{21}H_{30}O_4$ Purity: >98%	25182-1 25182-5 25182-10	1 mg 5 mg 10 mg
11-Deoxycortisol-[2H5] [1258063-56-7; unlabeled:152-58-9] MW 351.4913 $C_{21}H_{30}O_4$ **Isotopic Incorporation**: 98% 2H Purity: >99%	25181-1 25181-5 25181-10	1 mg 5 mg 10 mg

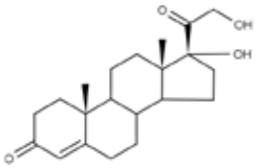
	Catalog #	Size
11-Deoxycortisol-[2H5]; methanol solution (1 mL) [1258063-56-7; unlabeled: 152-58-9] *CH6af*	25183-0.1	100 µg/ml
	25183-1	1 mg/ml

MW 351.4913
$C_{21}H_{30}O_4$
Isotopic Incorporation: 98% 2H Purity: >99%



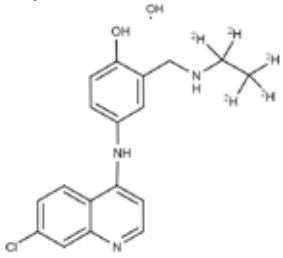
11-Deoxycortisol; methanol solution (1 mL) [152-58-9] *CH6af*	25184-0.1	100 µg/ml
	25184-1	1 mg/ml

MW 346.46051
$C_{21}H_{30}O_4$
Purity: >98%



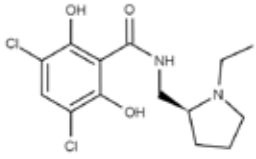
Desethylamodiaquine-[2H5] [11730223-19-2; unlabeled: 79352-78-6]	25185-2	2 mg
	25185-5	5 mg

MW 332.8389
$C_{18}H_{18}ClN_3O$
Isotopic Incorporation: 97% 2H; 4.89 D/molecule Purity: ≥98%



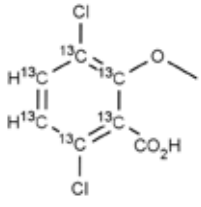
Desethylraclopride [119670-11-0]	25187-5	5 mg
	25187-25	25 mg

MW 333.20999
$C_{14}H_{18}Cl_2N_2O_3$
Purity: ≥98%



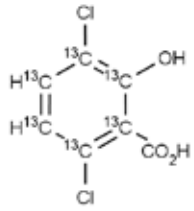
Dicamba-[13C6] [1173032-06-7; unlabeled: 1918-00-9]	25188-2	2 mg
	25188-5	5 mg
	25188-10	10 mg

MW 226.993
$C_8H_6Cl_2O_3$
Isotopic Incorporation: 99% 13C Purity: ≥98%



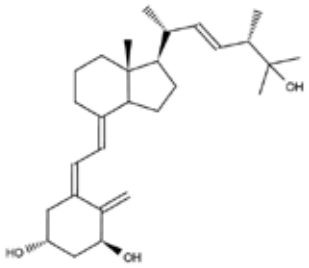
	Catalog #	Size
3,6-Dichloro-2-hydroxybenzoic-[13C6] Acid [1173019-34-5; unlabeled: 3401-80-7]	25190-2	2 mg
	25190-5	5 mg
	25190-10	10 mg

MW 212.967
$C_7H_4Cl_2O_3$
Isotopic Incorporation: 99% 13C Purity: >96%



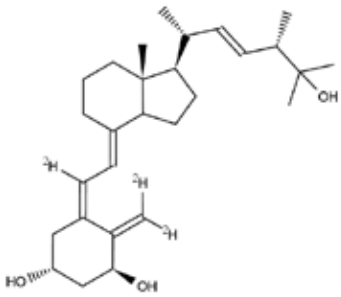
1,25-Dihydroxyvitamin-D2 [60133-18-8] *HSVW3af*	25197-0.1	0.1 mg
	25197-1	1 mg

MW 428.64719
$C_{28}H_{44}O_3$
Purity: ≥97%



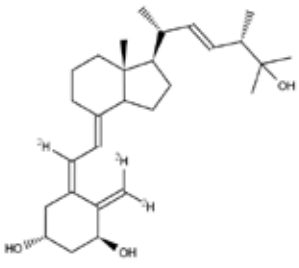
1,25-Dihydroxyvitamin-D2-[2H3] [1261254-46-9; unlabeled: 60133-18-8] *HSVW3af*	25196-0.1	0.1 mg

MW 431.66559
$C_{28}H_{44}O_3$
Isotopic Incorporation: 99% 2H Purity: ≥95%



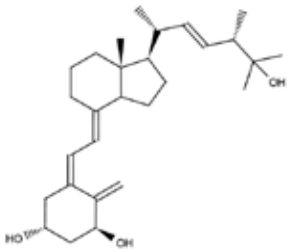
1,25-Dihydroxyvitamin-D2-[2H3]; ethanol solution (1mL)		
[1261254-46-9; unlabeled: 60133-18-8] *CHSVW5af*	25198-.005	5 µg/ml
	25198-0.05	50 µg/ml
	25198-0.1	100 µg/ml

MW 431.66559
$C_{28}H_{44}O_3$
Isotopic Incorporation: 99% 2H Purity: ≥95%

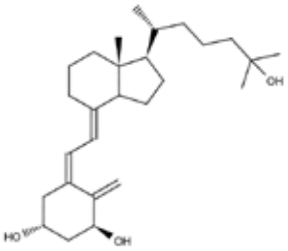


	Catalog #	Size
1,25-Dihydroxyvitamin-D2; ethanol solution (1mL) [60133-18-8] *CHSVW5af*	25199-.005	5 µg/ml
	25199-0.05	50 µg/ml
	25199-0.1	100 µg/ml
1,25-Dihydroxyvitamin-D3 [32222-06-3] *HPRS3abf*	25201-0.5	0.5 mg
	25201-1	1 mg
1,25-Dihydroxyvitamin-D3-[2H3] [128726-16-0; unlabeled: 32222-06-3] *HPRS3abf*	25200-1	1 mg
1,25-Dihydroxyvitamin-D3-[2H3]; ethanol solution (1mL) [128723-16-0; unlabeled: 32222-06-3] *CPRS5af*	25202-.005	5 µg/ml
	25202-0.05	50 µg/ml
	25202-0.1	100 µg/ml

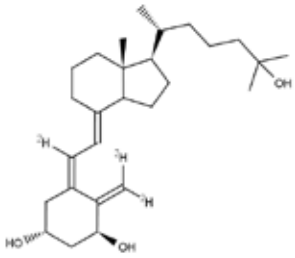
MW 428.64719
$C_{28}H_{44}O_3$
Purity: ≥97%



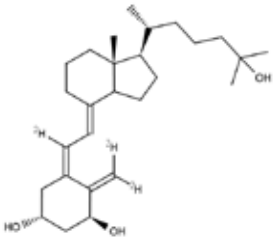
MW 416.63651
$C_{27}H_{44}O_3$
Purity: ≥97%



MW 419.65491
$C_{27}H_{44}O_3$
Isotopic Incorporation: 97% 2H; >2.90D/molecule Purity: ≥96%

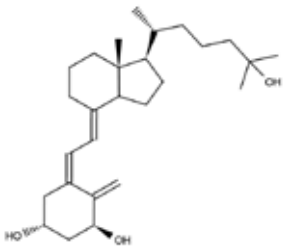


MW 419.65491
$C_{27}H_{44}O_3$
Isotopic Incorporation: 97% 2H; >2.90D/molecule Purity: ≥96%



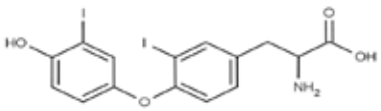
	Catalog #	Size
1,25-Dihydroxyvitamin-D3; ethanol solution (1mL) [32222-06-3] *CPRS5af*	25203-.005	5 µg/ml
	25203-0.05	50 µg/ml
	25203-0.1	100 µg/ml

MW 416.63651
$C_{27}H_{44}O_3$
Purity: ≥97%



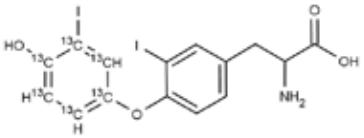
L-3,3′-Diiodothyronine [70-40-6] *HV3af*	25205-1	1 mg
	25205-5	5 mg
	25205-10	10 mg

MW 525.07703
$C_{15}H_{13}I_2NO_4$
Purity: ≥98%



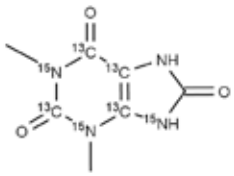
L-3,3′-Diiodothyronine -[13C6] [1217459-13-6; unlabeled: 70-40-6] *HV3af*	25204-1	1 mg
	25204-5	5 mg
	25204-10	10 mg

MW 531.0329
$C_{15}H_{13}I_2NO_4$
Isotopic Incorporation: 99.4% 13C Purity: ≥97%



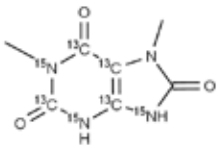
1,3-Dimethyluric Acid-[13C4,15N3] [1173019-16-3; unlabeled: 944-73-0] *A3af*	25206-1	1 mg
	25206-2	2 mg
	25206-5	5 mg

MW 203.1143
$C_7H_8N_4O_3$
Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98%



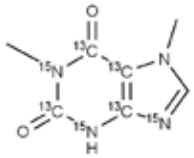
1,7-Dimethyluric Acid-[13C4,15N3] [117773023-17-0; unlabeled: 33868-03-0] *A3af*	25207-1	1 mg
	25207-2	2 mg
	25207-5	5 mg

MW 203.1143
$C_7H_8N_4O_3$
Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98%



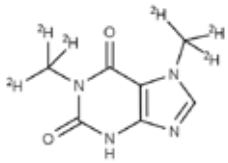
	Catalog #	Size
1,7 Dimethylxanthine-[13C4,15N3] [1173018-79-5; unlabeled: 611-59-6] *H3af*	25208-2	2 mg
	25208-5	5 mg

MW 187.1149
$C_7H_8N_4O_2$
Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98%



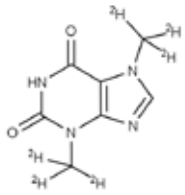
	Catalog #	Size
1,7 Dimethylxanthine-[2H6] [117490-41-2; unlabeled: 611-59-6] *H3af*	25209-2	2 mg
	25209-5	5 mg

MW 186.201
$C_7H_8N_4O_2$
Isotopic Incorporation: 98% 2H Purity: ≥98%



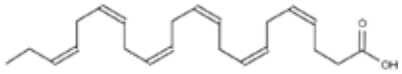
	Catalog #	Size
3,7 Dimethylxanthine-[2H6] [117490-40-1] *H3af*	25210-2	2 mg
	25210-5	5 mg

MW 186.201
$C_7H_8N_4O_2$
Isotopic Incorporation: 98% 2H Purity: ≥98%



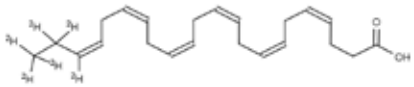
	Catalog #	Size
cis-4,7,10,13,16,19-Docosahexaenoic acid [6217-54-5] *EK3acf*	25213-1	1 mg
	25213-5	5 mg

MW 328.48831
$C_{22}H_{32}O_2$
Purity: ≥98%



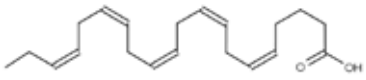
	Catalog #	Size
cis-4,7,10,13,16,19-Docosahexaenoic acid-[21,21,22,22,22-2H5]		
[1197205-71-2; unlabeled: 6217-54-5] *EK3acf*	25212-1	1 mg
	25212-5	5 mg

MW 334.5253
$C_{22}H_{32}O_2$
Isotopic Incorporation: >98% 2H Purity: ≥98%



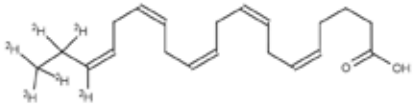
	Catalog #	Size
cis-5,8,11,14,17-Eicosapentaienoic acid [10417-94-4] *BK3acf*	25215-1	1 mg
	25215-5	5 mg

MW 302.45099
$C_{20}H_{30}O_2$
Purity: ≥98%



	Catalog #	Size
cis-5,8,11,14,17-Eicosapentaienoic acid-[19,19,19,20,20,20-2H5]		
[1197205-73-4; unlabeled: 10417-94-4] *BK3acf*	25214-1	1 mg
	25214-5	5 mg

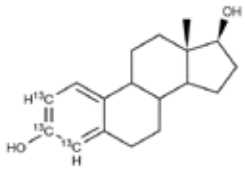
MW 308.48801
$C_{20}H_{30}O_2$
Isotopic Incorporation: >98% 2H Purity: ≥98%



	Catalog #	Size
(+/-)-Epicatechin [490-46-0] *H3af* MW 290.2681 $C_{15}H_{14}O_6$ Purity: ≥97%	25219-1 25219-5	1 mg 5 mg
(+/-)-Epicatechin-[13C3] [1217780-28-3; unlabeled: 490-46-0] *H3af* MW 293.246 $C_{15}H_{14}O_6$ **Isotopic Incorporation**: >99% 13C Purity: ≥97%	25218-1 25218-5	1 mg 5 mg
17β-Estradiol [50-28-2] *HM3af* MW 272.38199 $C_{18}H_{24}O_2$ Purity: ≥98%	25221-1 25221-5 25221-10	1 mg 5 mg 10 mg
17β-Estradiol-[2,3,4-13C3] [1261254-48-1; unlabeled: 50-28-2] *HM3af* MW 275.35989 $C_{18}H_{24}O_2$ **Isotopic Incorporation**: >99% 13C Purity: ≥98%	25220-1 25220-5 25220-10	1 mg 5 mg 10 mg
Estradiol-[16,16,17-2H3] [79037-37-9; unlabeled: 50-28-2] *HM3af* MW 275.40039 $C_{18}H_{24}O_2$ **Isotopic Incorporation**: 98% 2H Purity: ≥98%	25224-25 25224-50	25 mg 50 mg

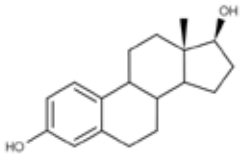
	Catalog #	Size
17β-Estradiol-[2,3,4-13C3]; acetonitrile solution (1 mL) [1261254-48-1; unlabeled: 50-2802] *CHM7acf*	25222-0.05	50 µg/ml
	25222-0.1	100 µg/ml

MW 275.35989
$C_{18}H_{24}O_2$
Isotopic Incorporation: >99% 13C Purity: ≥98%



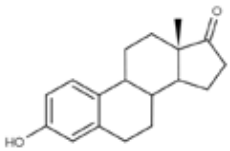
17β-Estradiol; acetonitrile solution (1 mL) [50-28-2] *CHM7acf*	25223-0.05	50 µg/ml
	25223-0.1	100 µg/ml

MW 272.38199
$C_{18}H_{24}O_2$
Purity: ≥98%



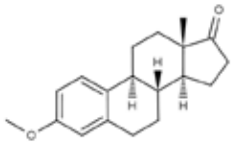
Estrone [53-16-7] *HM3af*	25225-1	1 mg
	25225-5	5 mg
	25225-10	10 mg

MW 270.366
$C_{18}H_{22}O_2$
Purity: ≥98%



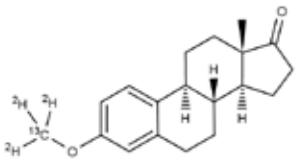
Estrone, 3-methyl ether [1624-62-0] *HM3af*	25229-1	1 mg
	25229-5	5 mg
	25229-10	10 mg

MW 284.3927
$C_{19}H_{24}O_2$
Purity: ≥98%



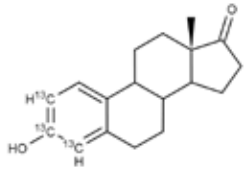
Estrone, 3-methyl-[13C,2H3] ether [1261254-60-7; unlabeled: 1624-62-0] *HM3af*	25228-5	5 mg
	25228-10	10 mg

MW 288.403
$C_{19}H_{24}O_2$
Isotopic Incorporation: 99% 13C; 98% 2H
Purity: ≥98%



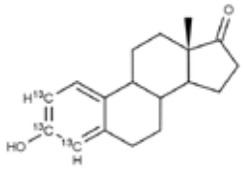
Estrone-[2,3,4-13C3] [1241684-29-6; unlabeled: 53-16-7] *HM3ag*	25128-1	1 mg
	25128-5	5 mg

MW 273.343
$C_{18}H_{22}O_2$
Isotopic Incorporation: ≥99% 13C Purity: ≥98%



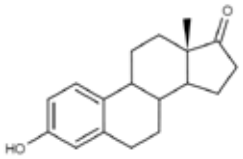
	Catalog #	Size
Estrone-[2,3,4-13C3]; methanol solution (1 mL) [1241684-29-6; unlabeled: 53-16-7] *CHM6af*	25226-0.05	50 µg/ml
	25226-0.1	100 µg/ml

MW 273.34399
$C_{18}H_{22}O_2$
Isotopic Incorporation: >99% 13C Purity: >98%



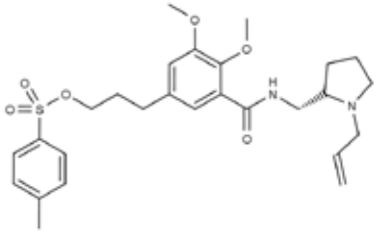
Estrone; methanol solution (1 mL) [53-16-7] *CHM6af*	25227-0.05	50 µg/ml
	25227-0.1	100 µg/ml

MW 270.36609
$C_{18}H_{22}O_2$
Purity: ≥98%



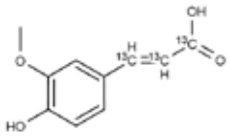
Fallypride Tosylate [166173-74-6] *H3af*	25230-2	2 mg
	25230-10	5x2 mg
	25230-20	10x2 mg

MW 516.65002
$C_{27}H_{36}N_2O_6S$
Purity: 99%



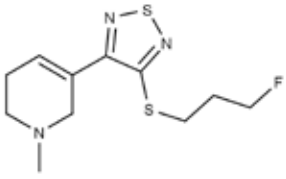
Ferulic acid-[13C3] [1217676-14-6; unlabeled: 537-98-4]	25231-1	1 mg
	25231-5	5 mg

MW 197.162
$C_{10}H_{10}O_4$
Isotopic Incorporation: 99.2% 13C Purity: >98%



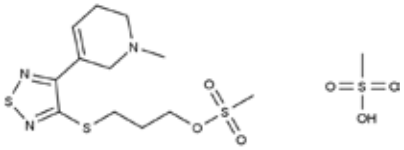
FP-TZTP Flouro Standard [424829-90-3]	25235-10	10 mg
	25235-25	25 mg

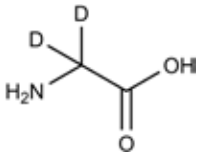
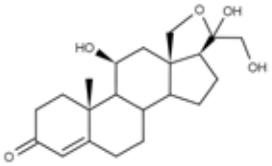
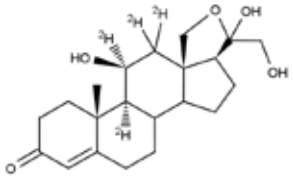
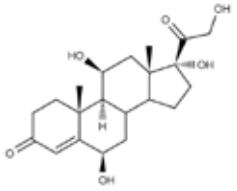
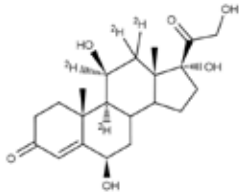
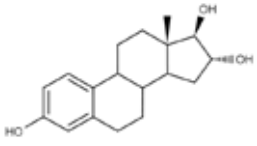
MW 273.39301
$C_{11}H_{16}FN_3S_2$
Purity: ≥98%



FP-TZTP Precursor [606114-32-3]	25234-25	25 mg
	25234-50	50 mg
	25234-100	100 mg

MW 445.59799
$C_{13}H_{23}N_3O_6S_4$
Purity: ≥98%

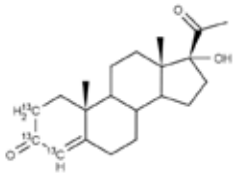


	Catalog #	Size
Glycine-2,2-d2 [4896-75-7] MW 77.08 mp 240 °C Appearance: Solid $C_2H_3D_2NO_2$ 	25385-100 25385-500	100 mg 500 mg
18-Hydroxycorticosterone [561-65-9] MW 362.4599 $C_{21}H_{30}O_5$ Purity: ≥98% 	25237-1	1 mg
18-Hydroxycorticosterone-[2H4] [1257742-38-3; unlabeled: 561-65-9] MW 366.4845 $C_{21}H_{30}O_5$ **Isotopic Incorporation**: 98% 2H Purity: ≥98% 	25236-1	1 mg
6β-Hydroxycortisol [3078-34-0] MW 378.45929 $C_{21}H_{30}O_6$ Purity: ≥97% 	25239-0.1 25239-1	100 mg 1 mg
6β-Hydroxycortisol-[2H4] [1261254-51-6; unlabeled: 3078-34-0] MW 382.48389 $C_{21}H_{30}O_6$ **Isotopic Incorporation**: 3.77 2H/molecule Purity: ≥97% 	25238-1	1 mg
16-α-Hydroxyestradiol (Estriol) [50-27-1] MW 288.38141 $C_{18}H_{24}O_3$ Purity: ≥97% 	25241-1 25241-5 25241-10	1 mg 5 mg 10 mg

	Catalog #	Size
16-α-Hydroxyestradiol (Estriol); methanol solution (1 mL) [50-27-1] *CHM6af*	25243-.005	5 µg/ml
	25243-0.05	50 µg/ml
	25243-0.1	100 µg/ml
MW 288.38141 $C_{18}H_{24}O_3$ Purity: ≥97%		
16-α-Hydroxyestradiol-[2,3,4-13C3] (Estriol-13C3) [1255639-56-5; unlabeled: 50-27-1]	25240-0.1	100 µg
	25240-0.25	250 µg
	25240-0.5	500 µg
	25240-1	1 mg
MW 291.35931 $C_{18}H_{24}O_3$ Isotopic Incorporation: >99% 13C Purity: ≥98%		
16-α-Hydroxyestradiol-[2,3,4-13C3] (Estriol-13C3); methanol solution (1 mL) [1255639-56-5; unlabeled: 50-27-1] *CHM6af*	25242-.005	5 µg/ml
	25242-0.05	50 µg/ml
	25242-0.1	100 µg/ml
MW 291.35931 $C_{18}H_{24}O_3$ Isotopic Incorporation: >99% 13C Purity: ≥98%		
16-α-Hydroxyestrone [566-76-7]	25245-1	1 mg
	25245-5	5 mg
	25245-10	10 mg
MW 286.36551 $C_{18}H_{22}O_3$ Purity: ≥98%		
16-α-Hydroxyestrone-[2,3,4-13C3] [1241684-28-5; unlabeled: 566-76-7]	25244-0.1	100 µg
	25244-0.25	250 µg
	25244-0.5	500 µg
	25244-1	1 mg
MW 289.34 $C_{18}H_{22}O_3$ Isotopic Incorporation: ≥99% 13C Purity: ≥98%		
17α-Hydroxyprogesterone [68-96-2]	25247-1	1 mg
	25247-5	5 mg
	25247-10	10 mg
MW 330.46109 $C_{21}H_{30}O_3$ Purity: ≥98%		

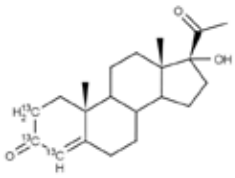
	Catalog #	Size
17α-Hydroxyprogesterone-[2,3,4-13C3] [unlabeled: 68-96-2]	25246-1	1 mg
	25246-5	5 mg

MW 333.43909
$C_{21}H_{30}O_3$
Isotopic Incorporation: >98% 13C Purity: ≥98%



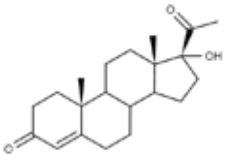
17α-Hydroxyprogesterone-[2,3,4-13C3]; methanol solution (1 mL) [unlabeled: 68-96-2] *CHV7af*	25248-0.1	100 µg/ml
	25248-1	1 mg/ml

MW 333.43909
$C_{21}H_{30}O_3$
Isotopic Incorporation: >98% 13C Purity: ≥98%



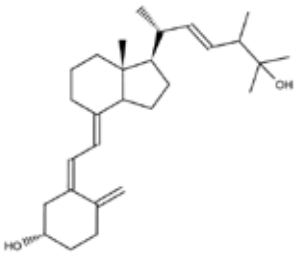
17α-Hydroxyprogesterone; methanol solution (1 mL) [25249-16-5] *CHV7af*	25249-0.1	100 µg/ml
	25249-1	1 mg/ml

MW 330.46109
$C_{21}H_{30}O_3$
Purity: ≥95%



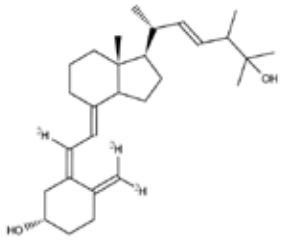
25-Hydroxyvitamin-D2 [21343-40-8]	25251-1	1 mg

MW 412.6478
$C_{28}H_{44}O_2$
Purity: ≥98%



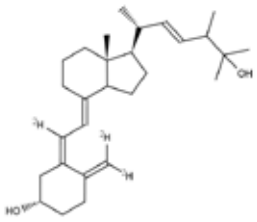
25-Hydroxyvitamin-D2-[2H3] [1217467-39-4; unlabeled: 21343-40-8]	25250-1	1 mg

MW 415.6662
$C_{28}H_{44}O_2$
Isotopic Incorporation: 97% 2H; >2.90/molecule Purity: ≥98%



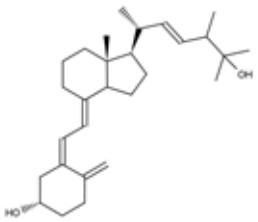
	Catalog #	Size
25-Hydroxyvitamin-D2-[2H3]; ethanol solution (1 mL) [1217467-39-4; unlabeled: 67-97-0] *CHV5af* . .	25252-.005	5 µg/ml
	25252-0.05	50 µg/ml
	25252-0.1	100 µg/ml

MW 415.6662
$C_{28}H_{44}O_2$
Isotopic Incorporation: 97% 2H; >2.90D/molecule Purity: ≥98%



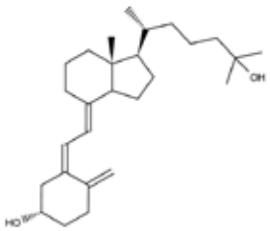
25-Hydroxyvitamin-D2; ethanol solution (1 mL) [21343-40-8] *CHV5af*	25253-.005	5 µg/ml
	25253-0.05	50 µg/ml
	25253-0.1	100 µg/ml

MW 412.6478
$C_{28}H_{44}O_2$
Purity: ≥98%



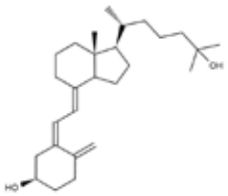
25-Hydroxyvitamin-D3 [19356-17-3]	25255-5	5 mg

MW 400.63708
$C_{27}H_{44}O_2$
Purity: ≥98%



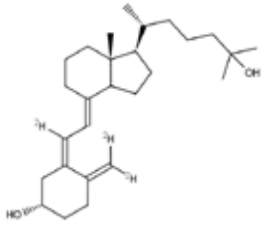
3-Epi-25-Hydroxyvitamin-D3 [73809-05-9] *HP3af*	25216-1	1 mg

MW 400.63708
$C_{27}H_{44}O_2$
Purity: ≥98%



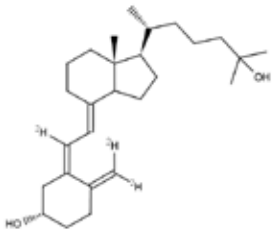
25-Hydroxyvitamin-D3-[2H3] [140710-94-7; unlabeled: 19356-17-3]	25254-1	1 mg
	25254-5	5 mg

MW 403.65549
$C_{27}H_{44}O_2$
Isotopic Incorporation: 97% 2H; ≥2.90D/molecule Purity: ≥98%



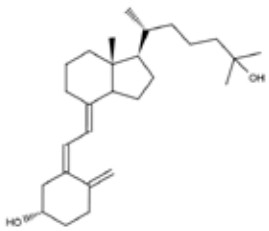
	Catalog #	Size
25-Hydroxyvitamin-D3-[2H3]; ethanol solution (1 mL) [140710-94-7; unlabeled: 19356-17-3] *CHVWX7af*	25256-.005	5 µg/ml
	25256-0.05	50 µg/ml
	25256-0.1	100 µg/ml

MW 403.65549
$C_{27}H_{44}O_2$
Isotopic Incorporation: 97% 2H; ≥2.90D/molecule Purity: ≥98%



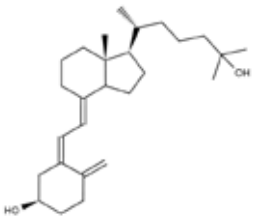
25-Hydroxyvitamin-D3; ethanol solution (1 mL) [19356-17-3] *CHVWX7af*	25257-.005	5 µg/ml
	25257-0.05	50 µg/ml
	25257-0.1	100 µg/ml

MW 400.63708
$C_{27}H_{44}O_2$
Purity: ≥98%



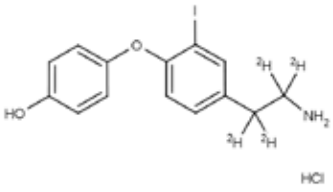
3-Epi-25-Hydroxyvitamin-D3; ethanol solution (1 mL) [73809-05-9] *CHP5af*	25217-0.05	50 µg/ml
	25217-0.1	100 µg/ml

MW 400.63708
$C_{27}H_{44}O_2$
Purity: ≥98%



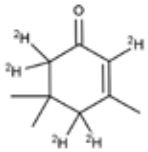
3-Iodothyronamine-[ethylamino-1,1,2,2-2H4] hydrochloride [712349-95-6]	25260-1	1 mg

MW 395.65701
$C_{14}H_{15}ClINO_2$
Isotopic Incorporation: >98% 2H Purity: ≥98%

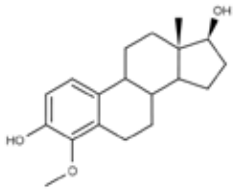
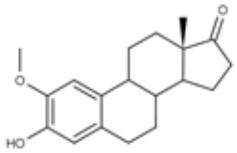
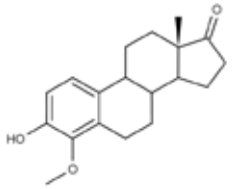
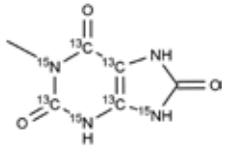
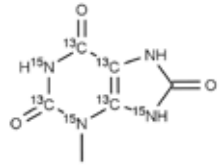


Isophorone-[2,4,4,6,6-2H5] [1262769-87-8; unlabeled: 78-59-1]	25261-10	10 mg
	25261-25	25 mg
	25261-50	50 mg
	25261-100	100 mg

MW 143.2377
$C_9H_{14}O$
Isotopic Incorporation: 97% D Purity: ≥95%



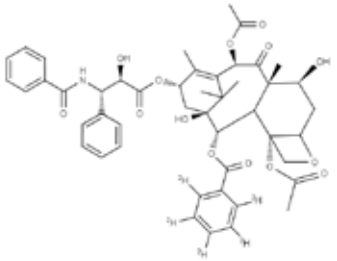
	Catalog #	Size
JHU87571 [1044503-80-1] *HU4af* MW 344.24899 $C_{17}H_{18}BrN_3$ Purity: ≥98%	25262-1 25262-5	1 mg 5 mg
2-Methoxy estradiol [362-07-2] *HM3af* MW 302.4079 $C_{19}H_{26}O_3$ Purity: ≥98%	25264-1 25264-5 25264-10	1 mg 5 mg 10 mg
2-Methoxy-[13C,2H3]-estradiol [1217470-09-1; unlabeled: 362-07-2] *HM3af* MW 306.4191 $C_{19}H_{26}O_3$ **Isotopic Incorporation**: 99% 13C; 98% 2H Purity: ≥98%	25263-1	1 mg
4-Methoxy-[13C,2H3]-estradiol [1217442-62-0; unlabeled: 26788-23-8] *HM3af* MW 300.4191 $C_{19}H_{26}O_3$ **Isotopic Incorporation**: 99% 13C; 98% 2H Purity: ≥98%	25267-1	1 mg
2-Methoxy-[13C,2H3]-estrone [1217460-84-8; unlabeled: 362-08-3] *HM4af* MW 304.4032 $C_{19}H_{24}O_3$ **Isotopic Incorporation**: 99% 13C; 98% 2H Purity: ≥98%	25265-1	1 mg
4-Methoxy-[13C,2H3]-estrone [1217437-34-7; unlabeled: 58562-33-7] *HM4af* MW 304.4032 $C_{19}H_{24}O_3$ **Isotopic Incorporation**: 99% 13C; 98% 2H Purity: ≥98%	25269-1	1 mg

	Catalog #	Size
4-Methoxyestradiol [26788-23-8] *HM3af* MW 302.4079 $C_{19}H_{26}O_3$ Purity: ≥98% 	25268-1 25268-5 25268-10	1 mg 5 mg 10 mg
2-Methoxyestrone [362-08-3] *HM4af* MW 300.39209 $C_{19}H_{24}O_3$ Purity: ≥98% 	25266-1 25266-5	1 mg 5 mg
4-Methoxyestrone [58562-33-7] *HM4af* MW 300.39209 $C_{19}H_{24}O_3$ Purity: ≥97% 	25270-1 25270-5 25270-10	1 mg 5 mg 10 mg
α-Methyltryptophan Precursor [136057-11-9] MW 416.447 $C_{20}H_{20}N_2O_6S$ Purity: ≥99%	25271-50 25271-100	5x10 mg 10x10 mg
1-Methyluric Acid-[13C4,15N3] [1173022-91-7; unlabeled: 708-79-2] *H4af* MW 189.448 $C_6H_6N_4O_3$ Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98% 	25272-2 25272-5	2 mg 5 mg
3-Methyluric Acid-[13C4,15N3] [1173-19-10-7; unlabeled: 605-99-2] *H4af* MW 189.08771 $C_6H_6N_4O_3$ Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98% 	25273-2 25273-5	2 mg 5 mg

	Catalog #	Size
7-Methyluric Acid-[13C4,15N3] *H4af* MW 189.08771 $C_6H_6N_4O_3$ **Isotopic Incorporation**: 99% 13C; 98%15N Purity: ≥98%	25274-2 25274-5	2 mg 5 mg
1-Methylxanthine-[13C,2N3] [1202865-49-3; unlabeled: 6136-37-4] MW 170.14861 $C_6H_6N_4O_2$ **Isotopic Incorporation:** 99% 13C; 98% 2H Purity: ≥97%	25276-1 25276-5	1 mg 5 mg
1-Methylxanthine-[13C4,15N3] [1173018-69-3; unlabeled: 6163-37-4] MW 173.0883 $C_6H_6N_4O_2$ **Isotopic Incorporation**: 99% 13C; 98% 15N Purity: ≥98%	25275-2 25275-5	2 mg 5 mg
3-Methylxanthine-[13C4,15N3] [1173018-93-3; unlabeled: 1-76-22-8] MW 173.0883 $C_6H_6N_4O_2$ **Isotopic Incorporation**: 99% 13C; 98% 15N Purity: ≥98%	25277-2 25277-5	2 mg 5 mg
7-Methylxanthine-[13C4,15N3] [11730118-93-3; unlabeled: 552-62-5] MW 173.0883 $C_6H_6N_4O_2$ **Isotopic Incorporation**: 99% 13C; 98% 15N Purity: ≥98%	25278-2 25278-5	2 mg 5 mg
Paclitaxel [33069-62-4] MW 853.90613 $C_{47}H_{51}NO_{14}$ Purity: ≥95%	25281-1 25281-5 25281-10	1 mg 5 mg 10 mg

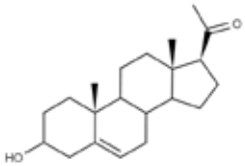
	Catalog #	Size
Paclitaxel-[2H5] [1261254-56-1; unlabeled: 33069-62-4]	25280-1	1 mg
	25280-5	5 mg

MW 858.93689
$C_{47}H_{51}NO_{14}$
Isotopic Incorporation: >98% 2H Purity: >97%



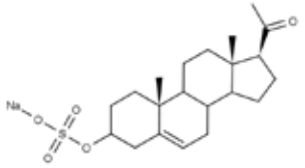
Pregnenolone [145-13-1]	25289-1	1 mg
	25289-5	5 mg
	25289-10	10 mg

$C_{21}H_{32}O_2$
Purity: ≥98%



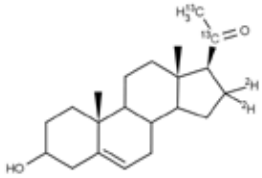
Pregnenolone sulfate sodium salt [1852-38-6]	25291-1	1 mg
	25291-5	5 mg
	25291-10	10 mg

MW 418.52301
$C_{21}H_{31}NaO_5S$
Purity: ≥98%



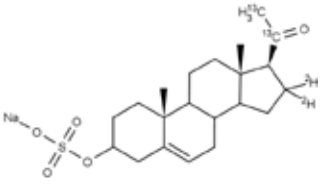
Pregnenolone-[20,21-13C2, 16,16-2H2] [unlabeled: 145-13-1]	25288-1	1 mg

MW 320.47519
$C_{21}H_{32}O_2$
Isotopic Incorporation: >99% 13C; >98% 2H. Purity: ≥98%



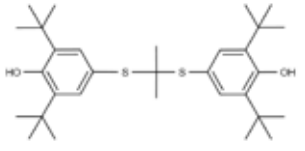
Pregnenolone-[20,21-13C2, 16,16-2H2] sulfate sodium salt [unlabeled: 1852-38-6]	25290-1	1 mg
	25290-5	5 mg

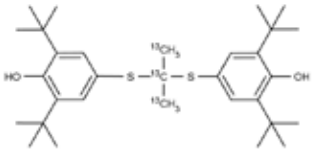
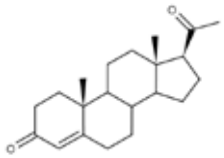
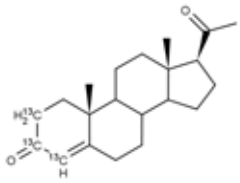
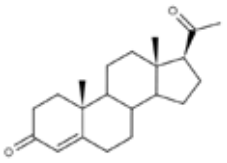
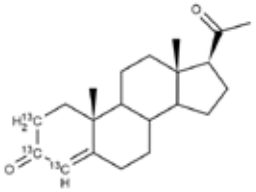
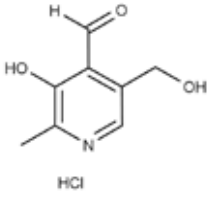
MW 422.51999
$C_{21}H_{31}NaO_5S$
Isotopic Incorporation: >99% 13C; >98% 2H Purity: ≥98%



Probucol [23288-49-5]	25283-1	1 mg
	25283-5	5 mg
	25283-10	10 mg

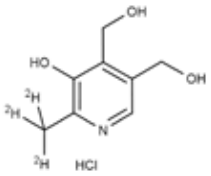
MW 516.84198
$C_{31}H_{48}O_2S_2$
Purity: 96%



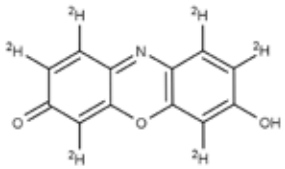
	Catalog #	Size
Probucol-[13C3] [1173019-29-8; unlabeled: 23288-49-5] MW 519.82001 $C_{31}H_{48}O_2S_2$ Isotopic Incorporation: 99% 13C Purity: >96% 	25282-10 25282-50	10 mg 50 mg
Progesterone [57-83-0] MW 314.4617 $C_{21}H_{30}O_2$ Purity: ≥98% 	25285-1 25285-5 25285-10	1 mg 5 mg 10 mg
Progesterone-[2,3,4-13C3] [327048-87-3; unlabeled: 57-83-0] MW 317.4397 $C_{21}H_{30}O_2$ Isotopic Incorporation: 99% 13C Purity: ≥98% 	25284-1 25284-5	1 mg 5 mg
Progesterone; acetonitrile solution (1 mL) [57-83-0] *CHM7acf* MW 314.4617 $C_{21}H_{30}O_2$ Purity: ≥98% 	25287-0.05 25287-0.1	50 µg/ml 100 µg/ml
Progesterone-[2,3,4-13C3]; acetonitrile solution (1 mL) [327048-87-3; unlabeled: 57-83-0] *CHM7acf* MW 317.4397 $C_{21}H_{30}O_2$ Isotopic Incorporation: 99% 13C Purity: ≥98% 	25286-0.05 25286-0.1	50 µg/ml 100 µg/ml
Pyridoxal hydrochloride [65-22-5] MW 203.623 $C_8H_{10}ClNO_3$ Purity: ≥98% 	25293-1 25293-5 25293-10	1 mg 5 mg 10 mg

	Catalog #	Size
Pyridoxal-[2H3] hydrochloride [1173023-49-8; unlabeled: 65-22-5]	25292-1	1 mg
MW 206.64101	25292-5	5 mg
$C_8H_{10}ClNO_3$	25292-10	10 mg
Isotopic Incorporation: 98% 2H; (M+2.99) Purity: ≥98%		
Pyridoxamine dihydrochloride [524-36-7]	25295-1	1 mg
MW 241.11501		
$C_8H_{14}Cl_2N_2O_2$		
Purity: >98%		
Pyridoxamine dihydrochloride [1173023-45-4; unlabeled: 524-36-7]	25295-5	5 mg
MW 244.133		
$C_8H_{14}Cl_2N_2O_2$		
Isotopic Incorporation: 98% 2H; (M+2.99) Purity: ≥98%		
Pyridoxamine dihydrochloride [524-36-7]	25295-10	10 mg
MW 241.11501		
$C_8H_{14}Cl_2N_2O_2$		
Purity: >98%		
Pyridoxamine-[2H3] dihydrochloride [1173023-45-4; unlabeled: 524-36-7]	25294-1	1 mg
MW 244.133	25294-5	5 mg
$C_8H_{14}Cl_2N_2O_2$		
Isotopic Incorporation: 98% 2H; (M+2.99) Purity: ≥98%		
Pyridoxine hydrochloride [58-56-0]	25297-1	1 mg
MW 205.63901	25297-5	5 mg
$C_8H_{12}ClNO_3$	25297-10	10 mg
Purity: ≥96%		

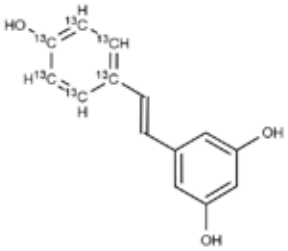
	Catalog #	Size
Pyridoxine-[2H3] hydrochloride [1189921-12-7; unlabeled: 58-56-0]	25296-1	1 mg
MW 208.657	25296-5	5 mg
$C_8H_{12}ClNO_3$	25296-10	10 mg
Isotopic Incorporation: 98% 2H Purity: ≥96%		



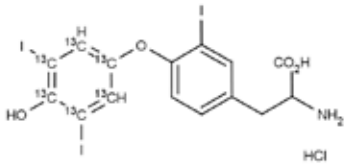
Resorufin-[2H6] [1196157-65-9; unlabeled: 635-78-9]	25298-10	10 mg
MW 219.22591	25298-50	50 mg
$C_{12}H_7NO_3$		
Isotopic Incorporation: >98% 2H Purity: ≥98%		



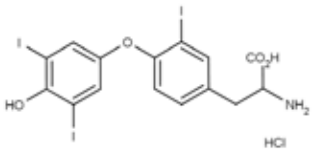
Resveratrol-[13C6] [1185247-70-4; unlabeled: 501-36-0]	25299-1	1 mg
MW 234.1992	25299-5	5 mg
$C_{14}H_{12}O_3$	25299-10	10 mg
Isotopic Incorporation: >99% 13C Purity: ≥97.8%		



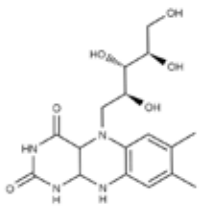
Reverse Triiodothyro-nine-[diiodophenyl-ring-13C6] hydrochloride		
[1217676-14-6; unlabeled: 2614-70-2]	25300-1	1 mg
MW 693.39001	25300-5	5 mg
$C_{15}H_{13}ClI_3NO_4$	25300-10	10 mg
Isotopic Incorporation: >99% 13C Purity: ≥95%		



Reverse Triiodothyronine hydrochloride [2614-70-2]	25301-1	1 mg
MW 687.43402		
$C_{15}H_{13}ClI_3NO_4$		
Purity: ≥95%		

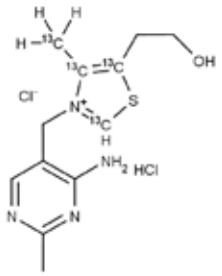


Riboflavin (Vitamin B2) [83-88-5]	25303-1	1 mg
MW 380.39569	25303-5	5 mg
$C_{17}H_{24}N_4O_6$	25303-10	10 mg
Purity: ≥97%		

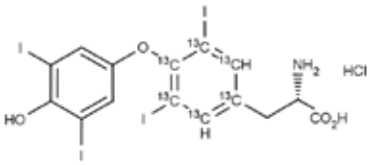


	Catalog #	Size
Riboflavin-[13c4,15n2] (Vitamin B2) MW 386.35309 $C_{17}H_{24}N_4O_6$ **Isotopic Incorporation**: 99% 13C; 98% 15N Purity: ≥97%	25302-1 25302-5 25302-10	1 mg 5 mg 10 mg
Spermidine 3HCl [334-50-9] *H4af* MW 254.6289 $C_7H_{19}N_3$ Purity: >95%	25305-1 25305-5 25305-10	1 mg 5 mg 10 mg
Spermidine-[2H6]•3HCl [1173019-26-5; unlabeled: 334-50-9] *H4af* MW 262.67801 $C_7H_{22}Cl_3N_3$ **Isotopic Incorporation**: 98.3%2H Purity: ≥95%	25304-5 25304-10 25304-50 25304-100	5 mg 10 mg 50 mg 100 mg
Spermine 4HCl [306-67-2] *H4af* MW 348.1839 $C_{10}H_{30}C_{l4}N_4$ Purity: >95%	25307-1 25307-5 25307-10	1 mg 5 mg 10 mg
Spermine-[2H8] 4HCl [1173022-85-9; unlabeled: 306-67-2] *H4af* **Isotopic Incorporation**: 97% 2H Purity: >95%	25306-5 25306-10	5 mg 10 mg
Thiamine•HCl [67-03-8] *H4af* MW 337.269 $C_{12}H_{18}C_{l2}N_4OS$ Purity: ≥98%	25314-1 25314-5 25314-10	1 mg 5 mg 10 mg

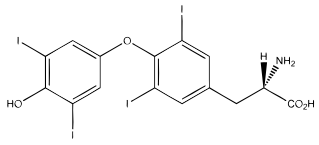
	Catalog #	Size
Thiamine-[13C4] HCl [1257525-77-1; unlabeled:67-03-8] *H4af*	25313-2	2 mg
MW 341.239	25313-5	5 mg
$C_{12}H_{18}C_{l2}N_4OS$	25313-10	10 mg
Isotopic Incorporation: >99% isotopic Purity: ≥98%		



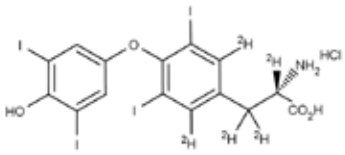
L-Thyroxine-[L-Tyr-ring-13C6] hydrochloride [720710-30-5; unlabeled:51-48-9]	25315-1	1 mg
MW 819.2869	25315-5	5 mg
Isotopic Incorporation: 99% 13C Purity: >98%	25315-10	10 mg



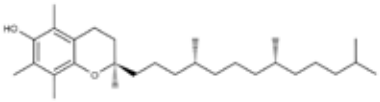
L-Thyroxine HCl [51-48-9] *H3af*	25317-1	1 mg
MW 813.3309	25317-5	5 mg
$C_{15}H_{11}I_4NO_4$	25317-10	10 mg
Purity: ≥98%		



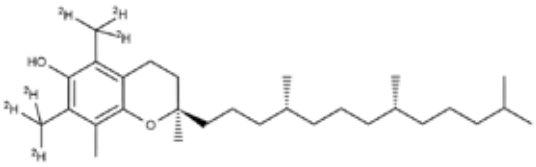
L-Thyroxine-[L-Tyr-2H5] hydrochloride [1261254-57-3; unlabeled: 51-48-9] *H3af*	25316-1	1 mg
MW 818.3619	25316-5	5 mg
$C_{15}H_{12}C_{l}I_4NO_4$	25316-10	10 mg
Isotopic Incorporation: 98% 2H; ≥4.90 D/molecule Purity: ≥98%		



α-Tocopherol [59-02-9] *H4af*	25319-1	1 mg
MW 430.706	25319-5	5 mg
$C_{29}H_{50}O_2$	25319-10	10 mg
Purity: ≥98%		

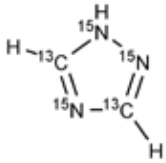


α-Tocopherol-[2H6] [113892-08-3; unlabeled:59-02-9] *H4af*	25318-2	2 mg
MW 436.7431	25318-5	5 mg
$C_{29}H_{50}O_2$	25318-10	10 mg
Isotopic Incorporation: >98% isotopic Purity: ≥98%		



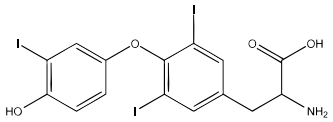
	Catalog #	Size
Triazole-[13C2,15N2] [1261170-82-4; unlabeled: 288-88-0] *H4af*	25320-1	1 mg
	25320-5	5 mg

MW 74.0308
$C_2H_3N_3$
Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98%



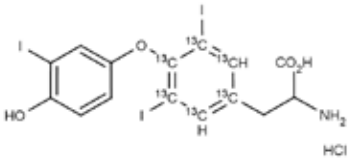
3,3',5-L-Triiodothyronine [6893-02-3] *H3af*	25322-1	1 mg
	25322-5	5 mg
	25322-10	10 mg

MW 650.97
$C_{15}H_{12}I_3NO_4$
Purity: ≥95%



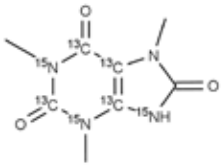
Triiodothyronine-[13C6] hydrochloride [1217473-60-3; unlabeled: 55-06-1]	25321-1	1 mg
	25321-5	5 mg
	25321-10	10 mg

MW 693.39
$C_{15}H_{13}ClI_3NO_4$
Isotopic Incorporation: ≥99% 13C Purity: ≥95%



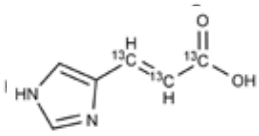
1,3,7-Trimethyluric Acid-[13C4,15N3] [1173022-55-3; unlabeled: 5415-44-1] *H4af*	25323-2	2 mg
	25323-5	5 mg

MW 217.1407
$C_8H_{10}N_4O_3$
Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥98%



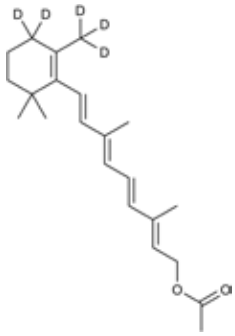
Cis-Urocanic Acid-[13C3] [1173097-34-1; unlabeled:7699-35-6] *H4af*	25324-1	1 g
	25324-2	2 mg
	25324-5	5 mg

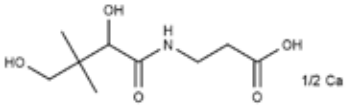
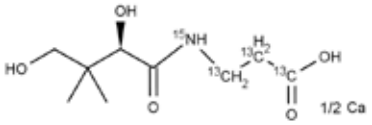
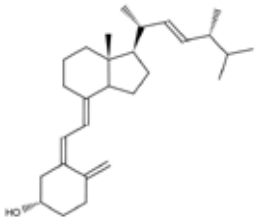
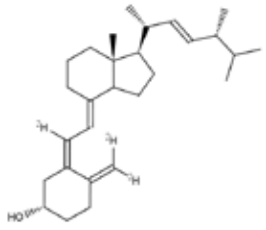
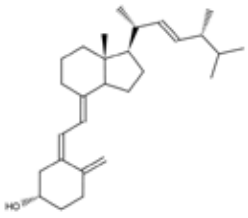
MW 141.102
$C_6H_6N_2O_2$
Isotopic Incorporation: ≥99% 13C Purity: ≥98%



Vitamin-A-d5 Acetate [127-47-9]	25361-1	1 mg
	25361-5	5 mg

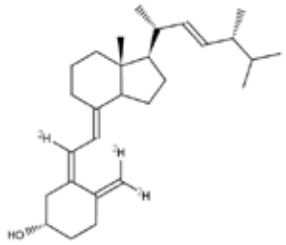
MW 333.52
$C_{22}H_{27}D_5O_2$
Purity: ≥95%



	Catalog #	Size
Vitamin B5 (Calcium Pantothenate) [137-08-6] *A2af* MW 478.548 $C_{18}H_{34}CaN_2O_{10}$ Purity: ≥97% 	25327-1 25327-5 25327-10	1 mg 5 mg 10 mg
Vitamin B5-[13C6,15N2] (Calcium Pantothenate-[13C6,15N2]) [356786-94-2; unlabeled:137-08-6] *A2af* MW 486.4909 $C_{18}H_{34}CaN_2O_{10}$ Isotopic Incorporation: 99% 13C; 98% 15N Purity: ≥97% 	25326-5 25326-10 25326-20	5 mg 10 mg 20 mg
Vitamin-D2 [50-14-6] *HP6af* MW 396.6484 $C_{28}H_{44}O$ Purity: ≥98% 	25328-1 25328-5 25328-10	1 mg 5 mg 10 mg
Vitamin D2-[2H3] [1217448-46-8; Unlabeled: 50-14-6] *HP3af* MW 399.67 Appearance: Solid Form $C_{28}H_{44}O$ 	25125-1	1 mg
Vitamin D2; ethanol solution (1 mL) [50-14-6] *CHP7af* MW 396.64841 $C_{28}H_{44}O$ Purity: ≥98% 	25330-0.1 25330-1	100 µg/ml 1 mg/ml

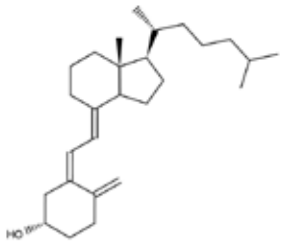
	Catalog #	Size
Vitamin D2-[2H3]; ethanol solution (1 mL) [1217448-46-8; unlabeled: 50-14-6] *CHP7af* . . .	25329-0.1	100 µg/ml
	25329-1	1 mg/ml

MW 399.66681
$C_{28}H_{44}O$
Isotopic Incorporation: 97% 2H; >2.90D/molecule Purity: ≥98%



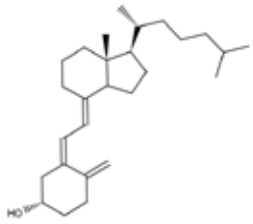
Vitamin-D3 [67-97-0] *HV7af* . . .	25331-1	1 mg
	25331-5	5 mg
	25331-10	10 mg

MW 384.6376
$C_{27}H_{44}O$
Purity: ≥98%



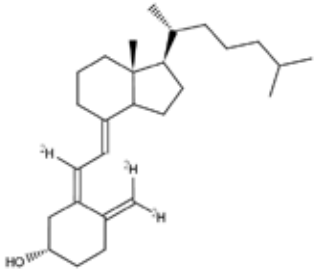
Vitamin D3; ethanol solution (1 mL) [67-97-0] *CHV5g* . . .	25332-0.1	100 µg/ml
	25332-1	1 mg/ml

MW 384.6377
$C_{27}H_{44}O$
Purity: >98%



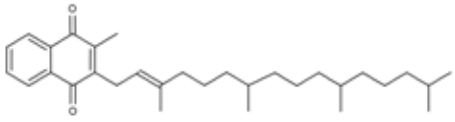
Vitamin D3-[2H3]; Ethanol Solution (1ml) [8066-48-4; unlabeled: 67-97-0] *CKV3r* . . .	25124-0.1	1 ml (100 ug/mL)
	25124-1.0	1 ml (1 mg/ml)

MW 387.656 Appearance: Solution
$C_{27}H_{44}O$
Isotopic Incorporation: 97% 2H; ≥2.90D/molecule Purity: ≥97%



Vitamin K1 [84-80-0] *H4af* . . .	25333-1	1 mg
	25333-5	5 mg
	25333-10	10 mg

MW 450.6957
$C_{31}H_{46}O_2$
Purity: ≥97% (sum of E and Z isomers)



	Catalog #	Size
Vitamin K1-[2H7] [1233937-39-7; unlabeled: 84-80-0] *A3abf* MW 457.738 $C_{31}H_{46}O_2$ **Isotopic Incorporation**: 99% 2H Purity: ≥97% (sum of E and Z isomers)	25126-1 25126-5 25126-10	1 mg 5 mg 10 mg
Vitamin K3 [58-27-5] *H4af* MW 172.1799 $C_{11}H_8O_2$ Purity: ≥97%	25335-1 25335-5 25335-10	1 mg 5 mg 10 mg
Vitamin K3-[2H8] [478171-80-1; unlabeled: 58-27-5] *H4af* MW 180.2292 $C_{11}H_8O_2$ **Isotopic Incorporation**: 98% 2H Purity: ≥97%	25334-50	50 mg
Yohimbine-[13C,2H3] [1261254-59-4; unlabeled: 65-19-0] *PRS7af* MW 358.4538 $C_{21}H_{26}N_2O_3$ **Isotopic Incorporation**: >99% isotopic Purity: ≥98%	25336-5 25336-10	5 mg 10 mg

NOTES

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