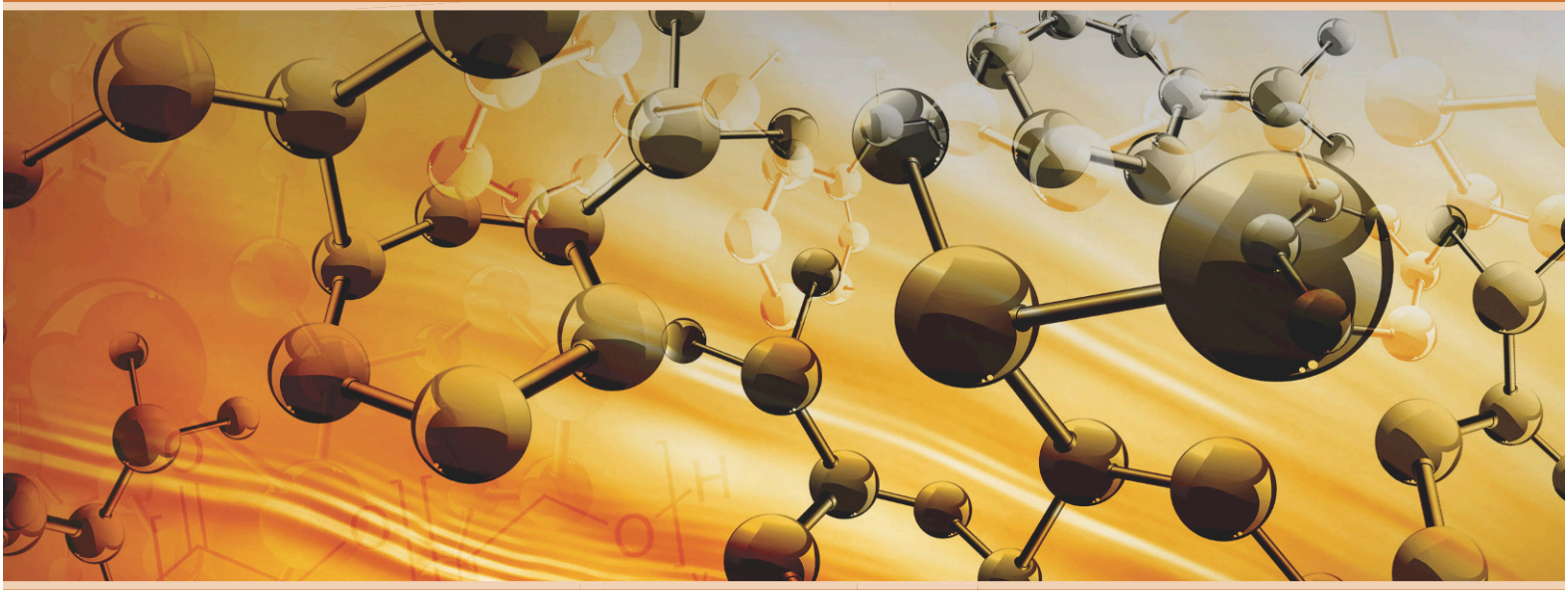
聚合物产品指南



含酸官能基聚合物及其盐
丙烯酸酯及甲基丙烯酸酯
聚合物酰胺
含胺官能基聚合物
生物可降解聚合物
嵌段共聚物
导电性聚合物
含卤素聚合物
液晶聚合物
含苯酚官能基聚合物
光学活性聚合物
聚乙二醇聚合物
反应性聚合物
苯乙烯系聚合物
水溶性聚合物

Polysciences, Inc.
Chemistry beyond the ordinary

Polymers Selection Guide

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 Guide At-A-Glance

Polymers

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	Catalog #	Size
Poly(acrylic acid)	2,000	63% AQ	06513-250	250 g
	5,000	50% AQ	06519-250	250 g
	50,000	25% AQ	00627-250	250 g
	345,000	25% AQ	03326-250	250 g
	450,000	powder	03312-100	100 g
	1,000,000	powder	06500-100	100 g
	4,000,000	powder	06501-100	100 g
Poly(acrylic acid) ammonium salt	250,000	powder	03311-25	25 g
Poly(acrylic acid) sodium salt	2,000	powder	06568-250	250 g
	3,000	40% AQ	18608-250	250 g
	6,000	powder	06567-250	250 g
	10,000	powder	18609-250	250 g
	60,000	35% AQ	18611-250	250 g
	225,000	20% AQ	18613-250	250 g
Poly(butadiene/maleic acid) 1:1 (molar)	12,000	42% AQ	07787-500	500 g
Poly(n-butyl acrylate/acrylic acid) [50:50]		20% latex/alcohol	19911-10	10 g
		powder	21058-5	5 g
Poly(ethyl acrylate/acrylic acid) [50:50]		powder	21056-5	5 g
		20% in Ethanol	19914-10	10 g
Poly(ethylene/acrylic acid) 92:8			06517-100	100 g
Poly(ethylene/maleic anhydride) 1:1 (molar)	400,000		02308-50	50 g
Poly(maleic acid)	1,000	50% AQ	09732-10	10 g
Poly(methacrylic acid)	100,000	powder	00578-10	10 g
Poly(methacrylic acid) ammonium salt	15,000	30% AQ	21169-25	25 g
Poly(methacrylic acid) sodium salt	15,000	30% AQ	21170-25	25 g
Poly(methyl methacrylate/methacrylic acid) [90:10]	100,000	powder	08207-50	50 g
[95:5]	500,000	powder	19629-100	100 g
[75:25]	1,200,000	powder	08208-100	100 g
Poly(methyl methacrylate/methacrylic acid) [80:20]		powder	08221-100	100 g
Poly(styrenesulfonic acid/maleic acid), sodium salt [50:50]	15,000	25% AQ	11795-25	25 g
[75:25]	20,000	powder	18407-25	25 g
Poly(vinyl chloride/vinyl acetate/maleic acid) 86:13:1			18356-500	500 g

Phosphoric Acids

	Mol. Weight	Form		
Poly(vinyl phosphoric acid), sodium salt	>200,000	powder	04391-5	5 g

Sulfonic Acids

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

Acrylate & Methacrylate Polymers

	Mol. Weight	Comments	Catalog #	Size
Poly(n-amyl methacrylate)			04295-10	10 g
Poly(benzyl methacrylate)			06562-10	10 g
Poly(iso-butyl acrylate), 20% soln. in toluene			07034-250	250 g
Poly(n-butyl acrylate), 20% soln. in toluene	10,000		03561-250	250 g
Poly(tert-butyl acrylate), 35% soln. in toluene			18240-25	25 g
Poly(iso-butyl methacrylate) fine powder, [η] = 0.60	200,000		02452-500	500 g
Poly(tert-butyl methacrylate)			07037-25	25 g
Poly(n-decyl acrylate), 20% soln. in toluene	130,000		07042-50	50 g
Poly(ethyl acrylate)	70,000		17342-2	2 g
Poly(glycidyl methacrylate), 10% solution in MEK	25,000	reacts with carboxyls, hydroxyls or amines	06524-5	5 g
Poly(2-hydroxyethyl methacrylate/methacrylic acid) 90:10		water soluble in presence of alkali	08725-10	10 g
Poly(2-hydroxypropyl methacrylate)		alcohol functional	09690-10	10 g
Poly(lauryl acrylate), 20% soln. in toluene			09697-25	25 g
Poly(lead methacrylate 2-ethylhexanoate/methyl methacrylate) 83:17 (by wt.)			16399-25	25 g
Poly(methyl methacrylate) [i.v. 0.18]	25,000		04554-500	500 g
[i.v. 0.40]	75,000		04553-500	500 g
[i.v. 1.25]	350,000		04552-500	500 g
	100,000		17913-500	500 g
Poly(methyl methacrylate/n-butyl methacrylate)			01922-500	500 g
Poly(octadecyl methacrylate), ~40% soln. in toluene	170,000		04321-100	100 g
Poly(iso-propyl methacrylate)			07052-10	10 g

Amides

	Mol. Weight	Form	Comments	Catalog #	Size
Polyacrylamide	1,500	50% AQ	water soluble polymer. high	23967-100	100 g
	10,000	50% AQ	molecular weight polymers find	22581-250	250 g
	600K - 1M	10% AQ	application as flocculants	19901-250	250 g
	5,000,000	1% AQ		21485-250	250 g
	5M- 6M	powder		02806-250	250 g
	18,000,000	powder		18522-100	100 g
Poly(acrylamide/acrylic acid) 30:70, Na Salt	200,000	powder	acidic acrylamide polymer	02220-250	250 g
90:10, Na Salt	200,000	powder		04652-250	250 g
60:40, Na Salt	>10,000,000	powder		18545-250	250 g
Polycaprolactam (Nylon 6)	18,000	powder	widely used in fibers	18180-250	250 g
	35,000	powder		18179-250	250 g
Polyetherimide	30,000	powder	high softening point resin	16845-100	100 g
Poly(2-ethyl-2-oxazoline)	5,000	powder	neutral water soluble can	24066-50	50 g
	50,000	powder	be hydrolyzed to linear	17808-100	100 g
	200,000	powder	polyethylenimine	24882-100	100 g
	500,000	powder		17810-100	100 g
Poly(hexamethyleneadipamide) (Nylon 6/6)		powder	used in fibers. mp 265-270° C	06557-500	500 g
Poly(hexamethylenesebacamide) (Nylon 6/10)				06558-500	500 g
Poly(N-iso-propylacrylamide)	40,000	powder	water soluble at RT. insoluble above 40° C	21458-10	10 g
Polymethacrylamide		powder	hydrophilic water soluble polymide	16144-10	10 g
Starch, poly(acrylamide/acrylic acid) graft, acid sodium salt			water absorbing, water holding resin	08215-100	100 g

Amine Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Chitin, practical		powder	acetylated amino glucose	00210-50	50 g
Chitosan (poly[d-glucosamine])	15,000		degree of deacetylation 84%	21161-50	50 g
Chitosan, Practical	100K - 300K	powder		00281-100	100 g
Poly(acrylamide/2-methacryloxyethyltrimethylammonium bromide) 80:20	50,000	20% AQ	cationic polymer	21743-10	10 g
Poly(Allyl Amine)	15,000		water soluble cationic polymer	24826-100	100 g
Poly(allylamine hydrochloride)	60,000	powder	pH of 1% AQ 4.0	18378-50	50 g
Poly(4-aminostyrene)	>150,000	powder	insol in org solvents and mineral acids	02823-1	1 g
Polyaniline, Emeraldine form (Acid doped)	15,000	powder	conductivity 2-4 S/cm	21288-5	5 g
Polyaniline, Emeraldine form (undoped)	15,000	powder	conductivity 10^{-10} S/cm	24043-5	5 g
Polyaniline, water-soluble		powder	product of polyaniline with propanesultone	23614-1	1 g
Poly(butadiene/acrylonitrile), amine terminated				09753-100	100 g
Poly(3-chloro-2-hydroxypropyl-2-methacryloxy ethyldimethylammonium chloride)		20% AQ	can be cyclized to oxirane with mild base	21480-10	10 g
Poly(diallyldimethylammonium chloride)	240,000	powder	linear cationic quat ammonium cyclopolymer	17338-10	10 g
		28% AQ		19898-250	250 g
Poly(2-dimethylaminoethyl methacrylate)	50,000	20% in tBuOH		21510-10	10 g
Poly(ethylene glycol) α-2-aminoethyl, ω-methoxy	2,000	solid	used for protein conjugation	24304-1	1 g
Poly(ethylene glycol) bis (2-aminoethyl)	1,000	powder	bifunctional PEG derivative that can be used to conjugate proteins and drugs for delivery	24285-1	1 g
	10,000	powder		24303-1	1 g
Polyethylenimine, branched (99%)	600	liquid	highly branched polyamine containing primary, secondary and tertiary amine groups	02371-500	500 g
	1,200	liquid		06088-100	100 g
	1,800	liquid		06089-100	100 g
	10,000	liquid		19850-100	100 g
	10,000	30% AQ		17938-100	100 g
	70,000	30% AQ		00618-100	100 g
	50K-100K	30% AQ		06090-100	100 g
Polyethylenimine, branched, permethylated, permethobromide	6,300	10% AQ	High charge density quaternary salt	21903-10	10 g
Polyethylenimine, Linear	2,500	powder	polymer with all secondary amines	24313-2	2 g
	25,000	powder		23966-2	2 g
	250,000	powder		24314-2	2 g
Polyethylenimine "Max"- High Potency Linear PEI (Equivalent to Mw ~2,500 in Free Base Form) Polyethylenimine	Nom. 4,000	solid	easy to handle hydrochloride salt form	24885-2	2 g
Polyethylenimine "Max"- High Potency Linear PEI (Equivalent to Mw 25,000 in Free Base Form)	Nom. 40,000	solid		24765-2	2 g
Poly(l-lysine hydrobromide)	40K - 60K	powder	cationic polymer for cell adhesion on surfaces	18619-50	50 mg
	60K - 120K	0.1% AQ		09730-25	25 ml
	100K - 140K	powder		21430-100	100 mg
Poly(2-methacryloxyethyl-trimethylammonium bromide)	50,000	20% AQ	cationic water soluble polymer	21479-10	10 g
	200,000	20% AQ		21746-10	10 g

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(N-methylvinylamine)	500,000	powder	water soluble all secondary polyamine	24038-5	5 g
Poly(vinylamine) hydrochloride	25,000	powder	water soluble all primary polyamine salt	23965-1	1 g
Poly(2-vinyl-1-methylpyridinium bromide)	50,000	20% AQ	cationic polymer, 50% quaternized	21477-10	10 g
Poly(2-vinylpyridine)	40,000	powder	water soluble at low pH	21382-10	10 g
	200K-400K	powder		19238-10	10 g
	300K-400K	powder		17770-10	10 g
Poly(4-vinylpyridine/divinylbenzene) beads		beads	can be used as adsorbant or ion exchange resin	06579-10	10 g
Poly(2-vinylpyridine N-oxide)	300K-400K	powder	water soluble cationic	01564-10	10 g
	200,000	powder		23684-10	10 g
Poly(4-vinylpyridine)	50,000	powder	water soluble at low pH	00112-50	50 g
	150K-200K	powder		22176-50	50 g
Poly(N-vinylpyrrolidone)	2,500	powder	water soluble polymer used as a thickener or protective colliod	16693-250	250 g
	4,000-6,000	powder		24737-250	250 g
	10,000	powder		03315-250	250 g
	40,000	powder		01051-250	250 g
	40,000	powder	pharmaceutical grade	01052-250	250 g
	1,000,000	powder		06067-250	250 g
Poly(N-vinylpyrrolidone/2-dimethylaminoethyl methacrylate), dimethyl sulfatequaternary [90:10]	100,000	20% AQ	water soluble quaternary salt	16294-100	100 g

Biodegradable Polymers

	Mol. Weight	Form	Comments		
Guar Gum	1,200,000		natural water-soluble polysaccharide	21255-100	100 g
Polycaprolactam	18,000		widely used in fibers	18180-250	250 g
	35,000			18179-250	250 g
Polycaprolactone	43,000	flakes	hydroxyl end group. mp 55-65° C	19561-500	500 g
Polycaprolactone diol	1,250	liquid	hydroxyl # 90mg /g of polymer	09706-500	500 g
	20,000	liquid	hydroxyl # 56mg /g of polymer	09694-500	500 g
Polycaprolactone, powdered	50,000	powder	hydroxyl end group. mp 58-60° C	25090-500	500 g
Poly(glycolic acid)	>100,000	powder	i.v. 1.0-2.00. decomposes in 6 mos. at 37° C at pH 9.0	06525-25	25 g
Poly[(R)-3-hydroxybutyrate]	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
Poly[(-)3-hydroxybutyric acid]	500,000	powder	mp 168 -176° C	16916-10	10 g

Poly(dl-lactide/glycolide) Polymers

		Mol. Weight	Form	Comments	Catalog #	Size
Poly(dl-lactide/glycolide)	[90:10]	<10,000	powder	i.v. 0.15 - 0.30	19076-5	5 g
	[85:15]	20,000	powder	i.v. 0.55 - 0.75	23989-5	5 g
	[80:20]	<10,000		i.v. 0.15 - 0.30	19077-5	5 g
	[70:30]	10,000	powder	i.v. 0.12 - 0.30	19247-5	5 g
	[50:50]	16.5K-22K	powder	i.v. 0.80 - 1.2	23987-5	5 g
		12K-16.5K	powder	i.v. 0.50 - 0.65	23986-5	5 g
	[75:25]	97,000		i.v. 0.55 - 0.75	25107-5	5 g
Poly(l-lactide/glycolide)	[70:30]	<10,000	powder		16587-5	5 g
		10K - 20K	powder		21864-5	5 g

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

	Mol. Weight	Form	Comments		
Poly(dl-lactic acid)	15,000	powder	i.v. 0.15 - 0.30	22505-10	10 g
	20K-30K	powder		16585-10	10 g
	330K - 600K	powder	i.v. 2.0 - 2.8 dl/g	23976-10	10 g
Poly(l-lactic acid)	1,600-2,400	powder	i.v. 0.10 - 0.20	18580-10	10 g
	40K-70K	powder	i.v. 0.80 - 1.20	06529-1	1 g
	80K-100K	powder	i.v. 1.30 - 1.60	18402-10	10 g
	325K-460K	powder	i.v. 4.00 - 5.00	18582-10	10 g
	700,000	powder	i.v. >7.00	21512-10	10 g

Polycaprolactone & Polyethylene Glycol Diblock Polymers

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

Polycaprolactone & Polyethylene Glycol Triblock Polymers

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

Polylactic Acid & Polyethylene Glycol Diblock Polymers

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

Polylactic Acid & Polyethylene Glycol Triblock Polymers

	Form	Comments		
PLA(1,000)-b-PEG(1000)-b-PLA(1,000)	visc. liquid	biodegradable, triblock copolymers	24500-1	1 g
PLA(2,000)-b-PEG(1000)-b-PLA(2,000)	solid		24501-1	1 g
PLA(5,000)-b-PEG(1000)-b-PLA(5,000)	solid		24502-1	1 g
PLA(1,000)-b-PEG(4000)-b-PLA(1,000)	solid		24503-1	1 g
PLA(1,000)-b-PEG(10,000)-b-PLA(1,000)	solid		24509-1	1 g
PLA(5,000)-b-PEG(10,000)-b-PLA(5,000)	solid		25026-1	1 g
PLA(10,000)-b-PEG(10,000)-b-PLA(10,000)	solid		25027-1	1 g

Poly(Lactic Acid-co-Glycolic Acid) Uniform Dry Microspheres

Mol. Weight	Composition - LA/GA	Size Range		
~150,000	50:50	70-80µm	25401-100	100 mg
			25401-250	250 mg
			25401-500	500 mg
~150,000	50:50	95-105µm	25402-100	100 mg
			25402-250	250 mg
			25402-500	500 mg
~150,000	50:50	115-125µm	25403-100	100 mg
			25403-250	250 mg
			25403-500	500 mg
~90,000	75:25	70-80µm	25398-100	100 mg
			25398-250	250 mg
			25398-500	500 mg
~90,000	75:25	95-105µm	25399-100	100 mg
			25399-250	250 mg
			25399-500	500 mg
~90,000	75:25	115-125µm	25400-100	100 mg
			25400-250	250 mg
			25400-500	500 mg

Block Copolymers

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(dimethylsiloxane-b-ethylene oxide), methyl terminated	600	liquid	surfactant-like diblock copolymer	09780-100	100 g
	3,000			21870-100	100 g
Polyethylene-co-vinyl acetate 70:30 (wt)	55,000			25356-25	25 g
	60,000			25357-25	25 g
	65,000			25358-25	25 g
	75,000			25359-25	25 g
Poly(ethylene oxide-b-propylene oxide) [ratio 0.15:1]	1,100	liquid	water-soluble or water-dispersible polymers with surfactant properties, chains are hydroxyl terminated	16273-100	100 g
[ratio 0.8:1]	2,900	liquid		16275-100	100 g
[ratio 0.33:1]	3,400	liquid		16274-100	100 g
[ratio 5.0:1]	8,750	waxy solid		16277-100	100 g
[ratio 3.0:1]	13,300	waxy solid		16276-100	100 g
Poly(styrene-b-isoprene-b-styrene)	19,000			18347-250	250 mg

Conductive Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Polyaniline, Emeraldine form (Acid doped)	15,000	powder	conductivity 2-4 S/cm	21288-5	5 g
(undoped)	15,000	powder	conductivity 10^{-10} S/cm	24043-5	5 g
water-soluble		powder	product of polyaniline with propanesultone	23614-1	1 g
Poly(3,4-ethylenedioxythiophene)/ poly(styrenesulfonate), aqueous dispersion (PEDT/PSS)		liquid	conductive polymer	24215-100	100g
Poly(3-methylthiophene)	500,000	powder	conductive polymer	21826-1	1 g
Poly(N-vinylcarbazole)	40,000	powder	photoconductive polymer	02428-50	50 g
Polypyrrole		powder	conductive polymer	21304-5	5 g

Halogen-containing Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Dextran, hydrogenated			i.v. 0.055 terminal alcohol	16653-100	100 g
Fluorinated Ethylene Propylene Copolymer 10-35 MFI		fine powder	high release characteristics, 10-35 MFI	24778-100	100 g
Fluorinated Ethylene Propylene Copolymer 35-70 MFI		fine powder	high release characteristics, 35-70 MFI	24779-100	100 g
Halocarbon 200 Oil [Poly(chlorotrifluoroethylene)		liquid	200 centistokes	25073-50	50 ml
Halocarbon 400 Oil [Poly(chlorotrifluoroethylene)		liquid	400 centistokes	25074-50	50 ml
Halocarbon 700 Oil [Poly(chlorotrifluoroethylene)		liquid	700 centistokes	25075-50	50 ml
Halocarbon 1,000N Oil [Poly(chlorotrifluoroethylene)		liquid	1,000 centistokes	25076-50	50 ml
Poly(4-bromostyrene)		powder	reactive bromine. ~43%	07030-1	1 g
Poly(2-chloro-1,3-butadiene)				21289-100	100 g
Poly(3-chloro-2-hydroxypropyl-2-methacryl oxyethyldimethylammonium chloride)			chlorohydroxypropyl group can be cyclized to oxirane by mild alkali	21480-10	10 g
Poly(4-chlorostyrene)	250,000	powder		07041-5	5 g
Poly(chlorotrifluroethylene)	500-600	oil	inert liquid of high temp baths	15176-100	100 g
Polyethylene, chlorinated, 25% Cl				01814-100	100 g
Poly(4-iodostyrene/styrene/divinylbenzene) ~58:40:2		powder	crosslinked styrene polymer with reactive iodine group	18148-5	5 g

	Mol. Weight	Form	Comments	Catalog #	Size
Polystyrene, brominated		powder	66% Br	21305-100	100 g
Poly(styrenesulfonyl fluoride)				16146-5	5 g
Poly(tetrafluoroethylene) Teflon® 30B)		60% in H_2O	dispersion; 0.05-0.5 microns	21539-100	100 g
Poly(tetrafluoroethylene) (Teflon® 7A)		powder	35 microns	08816-100	100 g
Poly(tetrafluoroethylene) (Teflon® 6)		powder	500 microns	01344-100	100 g
Poly(tetrafluoroethylene propylene)				04615-50	50 g
Poly(vinyl chloride)				09708-250	250 g
Poly(vinylidene chloride/acrylonitrile) 80:20	150,000	powder	polymer with barrier properties	09747-100	100 g
Poly(vinylidene fluoride) 5-12K poise		powder	inert polymer, often used as a coating	15190-100	100 g
15-23K poise		powder		15191-100	100 g
28-34K poise		powder		18734-100	100 g
26K poise		powder		06094-100	100 g
Poly(4-vinylphenol) brominated, 50% Br			softens at 210° C. flame retardant	09762-50	50 g

Liquid Crystal Polymers

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

	Mol. Weight	Form	Comments		
Cholesteryl Chloride		powder	cholesteric derivatives, liquid crystal polymers	24814-50	50 g
Cholesteryl Nonanoate		powder		24817-50	50 g
Cholesteryl Oleyl Carbonate		powder		24815-50	50 g
Cholesteryl Propionate		powder		24816-50	50 g

Phenol-functional Polymers

	Mol. Weight	Form	Comments		
Poly(4-vinylphenol)	1,500-7,000	powder	reactive polyphenol	06527-50	50 g
Poly(4-vinylphenol)	9,000-11,000	powder		18979-10	10 g
Poly(4-vinylphenol)	22,000	powder		18980-10	10 g

Photoactive Polymers

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

Poly(ethylene glycol) Polymers

	Mol. Weight	Comments		
Poly(ethylene glycol)	200	nonionic water soluble polymer	01112-250	250 g
Poly(ethylene glycol)	300		01110-250	250 g
Poly(ethylene glycol)	400		01109-250	250 g
Poly(ethylene glycol)	600		00684-250	250 g
Poly(ethylene glycol)	1,000		00682-250	250 g
Poly(ethylene glycol)	1,450		00679-250	250 g
Poly(ethylene glycol)	3,400		06102-250	250 g
Poly(ethylene glycol)	7,500		06103-250	250 g
Poly(ethylene glycol)	10K-16K		22567-250	250 g

	Mol. Weight	Comments	Catalog #	Size
Poly(ethylene glycol)	2,000		25360-250	250 g
Poly(ethylene glycol)	20,000		22568-250	250 g
Poly(ethylene glycol)	1,540	pharmaceutical grade	01102-100	100 g
Poly(ethylene glycol)	3,400	pharmaceutical grade	00678-100	100 g
Poly(ethylene glycol)	8,000	pharmaceutical grade	17243-100	100 g
Poly(ethylene glycol)-bisphenol A diglycidyl ether adduct	200		04686-250	250 g
Poly(ethylene glycol) (200) adipate	530	reaction product of one mole (adipic acid) and two moles (PEG 200)	21509-100	100 g
Poly(ethylene glycol) α-2-aminoethyl, ω-methoxy	2,000	used for protein conjugation	24304-1	1 g
Poly(ethylene glycol) bis (2-aminoethyl)	1,000	can be used to conjugate proteins and drug substances for drug delivery	24285-1	1 g
	10,000		24303-1	1 g
Poly(ethylene glycol) (n) dimethyl ether	400	used to complex metals and phase transfer agents	17031-25	25 g
Poly(ethylene glycol) (n) dimethyl ether	1000		17032-25	25 g
	2,000		17033-25	25 g
Poly(ethylene glycol) (200) mono-stearate	200		03142-100	100 g
Poly(ethylene glycol) (750) monocarboxymethyl ether monomethyl ether	750	carboxylic acid-terminated, can be coupled to molecules with carbodiimides	21483-500	500 mg
Poly(ethylene glycol) monomethyl ether	350	hydroxyl group at one end	04200-500	500 g
	550		04457-500	500 g
	750		00626-500	500 g
	1,900		04242-500	500 g
	5,000		05986-500	500 g
Poly(ethylene glycol) (n) diacrylate	200		00669-250	250 g
	400		01871-250	250 g
	4,000		15246-1	1 g
Poly(ethylene glycol) (n) diglycidyl ether	200	Crosslinker for amine-, hydroxyl-, and carboxyl-functional polymers.	08209-100	100 g
	400		08210-100	100 g
	600		08211-100	100 g
	1,000		24047-100	100 g
Poly(ethylene glycol) (n) dimethacrylate	200		00096-100	100 g
	400		15179-100	100 g
	1,000		15178-100	100 g
Poly(ethylene glycol) (n) distearate	200		02298-100	100 g
	400		01048-100	100 g
	6,000		19234-100	100 g
Poly(ethylene glycol) (n) monomethacrylate	200		16712-100	100 g
	400		16713-100	100 g
Poly(ethylene glycol) (n) monomethyl ether monomethacrylate	200		16664-100	100 g
	400		16666-100	100 g
	1,000		16665-500	500 g
Poly(ethylene glycol) (n) monomethyl ether, mono(succinimidyl succinate) ester	1,900		21482-500	500 mg
	5,000		18000-500	500 mg
Poly(ethylene glycol terephthalate)		widely used in films, fibers and drink bottles.	04301-250	250 g

Reactive Polymers

Aldehyde and Ketone Functional Polymers

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

Carboxylic Acid Anhydride Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(butadiene/maleic anhydride) 1:1 (molar)	10K - 15K	25% in acetone	can be reacted at anhydride or backbone olefin	07788-500	500 g
Poly(ethylene/maleic anhydride) 1:1 (molar)	400,000	powder	reacts with alcohols or amines	02308-50	50 g
Poly(maleic anhydride)	~5,000	powder	reacts with alcohols or amines	02348-5	5 g
Poly(maleic anhydride 1-octadecene) 1:1 (molar)	30K- 50K	powder	reacts with alcohols or amines, hydrophobic	05152-100	100 g
Poly(styrene/maleic anhydride) [67:33]	7,500			03497-500	500 g
Poly(styrene/maleic anhydride) [75:25]	9,500		i.v. ~0.80	03498-500	500 g

Carboxylic Acid Chloride Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(acryloyl chloride)	10,000	25% in dioxane	reacts with alcohols or amines	04293-10	10 g
Poly(methacryloyl chloride)		25% in dioxane	reacts with alcohols or amines	04315-10	10 g

Oxirane Functional Polymers

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

Hydroxyl Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(1-glycerol methacrylate)		waxy solid	hydrophilic, water soluble	16855-10	10 g
Poly(2-hydroxyethyl methacrylate)	200,000	12% in Ethanol	water swellable	18894-100	100 ml
	200,000	powder	water swellable	09689-25	25 g
Poly(vinyl alcohol)	6,000	powder	80 mol % hydrolyzed	22225-500	500 g
	25,000	powder	88 mol % hydrolyzed	02975-500	500 g
	25,000	powder	98% hydrolyzed	04397-500	500 g
	78,000	powder	88 mol % hydrolyzed	15132-500	500 g
	78,000	powder	98 mol % hydrolyzed	15130-500	500 g
	78,000	powder	99.7 mol % hydrolyzed	15129-500	500 g
	108,000	powder	99.7 mol % hydrolyzed	04324-500	500 g
	125,000	powder	88 mol % hydrolyzed	04398-500	500 g
	133,000	powder	99 mol % hydrolyzed	02815-500	500 g

Nitrile Functional Polymers

	Mol. Weight	Form	Comments	Catalog #	Size
Polyacrylonitrile	150,000	powder		03914-100	100 g
Poly(butadiene/acrylonitrile) [67:33]		solid	widely used nitrile rubber	06561-500	500 g
Poly(methacrylonitrile)		powder		04314-10	10 g

Styrenic Polymers

	Mol. Weight	Comments	Catalog #	Size
Poly(alpha-methylstyrene)	5,000		07630-500	500 g
Poly(4-iodostyrene/styrene/ divinylbenzene) ~58:40:2		crosslinked styrene polymer with reactive iodine group	18148-5	5 g
Poly(4-methylstyrene/styrene) 90:10			19831-10	10 g
Polystyrene	800-5,000	atactic flakes, softening point 125°	23637-100	100 g
	50,000	atactic flakes, bimodal with MW ~50,000 & 1500 (50:50)	18544-100	100 g
	125K-250K	atactic pellets	00574-100	100 g
Polystyrene, brominated		66% Br	21305-100	100 g

Water Soluble Polymers

	Mol. Weight	Form	Comments		
Cellulose, ethyl ether				02354-500	500 g
				05429-500	500 g
Cellulose, ethyl hydroxyethyl ether				05431-100	100 g
Cellulose, hydroxyethyl ether	~90,000	powder	water-soluble cellulose ether, used as a binder and thickening agent	05570-500	500 g
	720,000	powder		05569-500	500 g
	1,000,000	powder		05568-500	500 g
Cellulose, methyl hydroxyethyl ether		2% soln. in H2O	cellulose derivative	21275-500	500 g
Chitosan (poly d-glucosamine)	~15000	powder	degree of deacetylation 84%	21161-50	50 g
Chitosan, Practical	100K-300K	powder	amine 7-12%	00281-100	100 g
Dextran	17,500	powder	i.v. 0.10 - 0.14	01341-100	100 g
Dextran	100K-200K	powder	i.v. 0.343	05056-100	100 g
Dextran	200K-300K	powder	i.v. 0.4 - 0.5/37°C	22500-100	100 g
Dextran	3M-7M	powder		05059-100	100 g
Dextran, hydrogenated	5,000,000	powder	i.v. 0.055 terminal alcohol	16653-100	100 g
Dextran sulfate, sodium salt	500,000	powder	sulfur 19%, anionic dextran derivative	00407-100	100 g
Dextran, DEAE ether	500,000			15757-50	50 g
Guar Gum	1,200,000	powder	natural water-soluble polysaccharide	21255-100	100 g
Poly(acrylamide)	1,500	50% AQ	nonionic water-soluble polymer; high Mw polymer used as flocculant	23967-100	100 g
	10,000	50% AQ		22581-250	250 g
	850,000	10% AQ		19901-250	250 g
	5,000,000	1% AQ		21485-250	250 g
	5M-6M	powder		02806-250	250 g
	18,000,000	powder		18522-100	100 g
Poly(acrylamide/acrylic acid), potassium salt, crosslinked			active ingredient of low-bulk diapers, potassium salt	24620-250	250 g
Poly(acrylamide/acrylic acid) Na+ [30:70]	200,000	powder	anionic acrylamide polymer	02220-250	250 g
[90:10]	200,000	powder		04652-250	250 g
[60:40]	>10,000,000	powder		18545-250	250 g
Poly(acrylamide/2-methacryloxyethyl-trimethylammonium bromide) [80:20]	50,000	20% AQ	cationic acrylamide polymer	21743-10	10 g
Poly(acrylic acid)	2,000	63% AQ		06513-250	250 g
	5,000	50% AQ		06519-250	250 g
	50,000	25% AQ		00627-250	250 g

	Mol. Weight	Form	Comments	Catalog #	Size
	345,000	25% AQ		03326-250	250 g
	450,000	powder		03312-100	100 g
	1,000,000	powder		06500-100	100 g
	4,000,000	powder		06501-100	100 g
Poly(acrylic acid) ammonium salt	250,000	powder		03311-25	25 g
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
	3,000	40% AQ		18608-250	250 g
	6,000	powder		06567-250	250 g
	10,000	40% AQ		18609-250	250 g
	60,000	35% AQ		18611-250	250 g
	225,000	20% AQ		18613-250	250 g
Poly(acrylic acid), sodium salt, crosslinked			sodium salt	24619-250	250 g
Poly(Allyl Amine)	15,000	15% solid in H_2O	water soluble cationic polymer	24826-100	100 g
Poly(diallyldimethylammonium chloride)	8,500	28% solid in H_2O	supplied as hydrochloride salts	24828-100	100 g
	240,000	powder	linear cationic cyclic polymer	17338-10	10 g
Poly(allylamine hydrochloride)	60,000	powder	polymeric primary amine	18378-50	50 g
Poly(butadiene/maleic acid) 1:1 (molar)	12,500	42% AQ	anionic polymer capable of anhydride or backbone unsaturation reaction	07787-500	500 g
Poly(n-butyl acrylate/2-methacryloxy-ethyltrimethylammonium bromide) [80:20]		20% AQ	cationic polymer	21744-10	10 g
Poly(3-chloro-2-hydroxypropyl-2-methacryloxy ethyldimethylammonium chloride)		20% AQ	chlorohydroxypropyl group can be cyclized to oxirane by mild alkali	21480-10	10 g
Poly(2-dimethylaminoethyl methacrylate)	50,000	20% in BuOH		21510-10	10 g
Poly(ethyl acrylate/acrylic acid) [50:50]		20% in EtOH		19914-10	10 g
		powder		21056-5	5 g
Poly(ethylene/acrylic acid) 92:8				06517-100	100 g
Poly(ethylene oxide)	100,000	waxy solid		06104-500	500 g
	200,000	waxy solid		17503-500	500 g
	300,000	waxy solid		06105-500	500 g
	600,000	waxy solid		06106-500	500 g
	1,000,000	waxy solid		21295-500	500 g
	4,000,000	waxy solid		04030-500	500 g
	5,000,000	waxy solid		04031-500	500 g
	8,000,000	waxy solid		21296-500	500 g
Poly(ethylene oxide-b-propylene oxide) [ratio 0.15:1]	1,100	liquid	water-soluble or water-dispersible polymers with surfactant properties, chains are hydroxyl terminated	16273-100	100 g
[ratio 0.8:1]	2,900	liquid		16275-100	100 g
[ratio 0.33:1]	3,400	liquid		16274-100	100 g
[ratio 5.0:1]	8,750	waxy solid		16277-100	100 g
[ratio 3.0:1]	13,300	waxy solid		16276-100	100 g
Poly(2-ethyl-2-oxazoline)	5,000	powder	neutral water soluble can	24066-50	50 g
	50,000	powder	be hydrolyzed to linear	17808-100	100 g
	200,000	powder	polyethylenimine	24882-100	100 g
	500,000	powder		17810-100	100 g

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(1-glycerol methacrylate)		waxy solid	hydrophilic, water-swellable polymer, probably cross-linked	16855-10	10 g
Poly(2-hydroxyethyl methacrylate/ methacrylic acid) 90:10		solid	water soluble in presence of alkali	08725-10	10 g
Poly(2-hydroxypropyl methacrylate)				09690-10	10 g
Poly(l-lysine hydrobromide)	40K-60K	powder		18619-50	50 mg
	90,000	0.1% AQ	cationic polymer, used for promotion of cell adhesion to surfaces	09730-25	25 ml
	120,000	powder		21430-100	100 mg
Poly(maleic acid), 50% soln. in water	1,000	50% AQ		09732-10	10 g
Poly(methacrylamide)	5,000	powder	water soluble polyamide	16144-10	10 g
Poly(methacrylic acid)	100,000	solid	water soluble polymer	00578-50	50 g
Poly(methacrylic acid) ammonium salt	15,000	30% AQ	forms insoluble salts with polyamines	21169-25	25 g
Poly(methacrylic acid) sodium salt	15,000	30% AQ	forms insoluble salts with polyamines	21170-25	25 g
Poly(2-methacryloxyethyltrimethylammonium bromide)	50,000	20% AQ	cationic (quaternary ammonium)	21479-10	10 g
	200,000	20% AQ		21746-10	10 g
Poly(N-iso-propylacrylamide)	40,000	solid	soluble at RT, insoluble above 40° C	21458-10	10 g
Poly(oxyethylene) sorbitan monolaurate	1,230	liquid	surfactant, Tween® 20	06110-100	100 g
Polypropylene			atactic	23968-100	100 g
			chromatographic grade	04342-100	100 g
	220,000	flakes	Isotactic	06536-100	100 g
Poly(styrenesulfonic acid)	70,000	30% AQ	ionic polymer in acid form	08770-250	250 g
Poly(styrenesulfonic acid), sodium salt	75,000	powder	ionic polymer in salt form	08772-25	25 g
	1,000,000	powder		08773-25	25 g
Poly(styrenesulfonic acid/maleic acid)	15,000	25% AQ	can be used as a pigment dispersant	11795-25	25 g
Poly(styrenesulfonic acid/maleic acid)	20,000	solid		18407-25	25 g
Poly(N-vinyl acetamide)	~4,060,000	powder	moderately water soluble, stable	24808-50	50 g
Poly(N-methyl N-vinyl acetamide) homopolymer		powder	may be converted to poly (N-methyl vinyl amine) by hydrolysis	24810-50	50 g
Poly(N-vinyl acetamide-co-sodium acrylate)		powder	moderately water soluble, stable	24809-50	50 g
Poly(N-vinyl acetamide) homopolymer, Crosslinked		powder	moderately water soluble, stable	24807-50	50 g
Poly(vinyl acetate)				06069-500	500 g
			40% hydrolyzed	17561-25	25 g
Poly(vinyl alcohol)	6,000	powder	88% hydrolyzed	22225-500	500 g
	25,000	powder	88% hydrolyzed	02975-500	500 g
	25,000	powder	98% hydrolyzed	04397-500	500 g
	78,000	powder	88% hydrolyzed	15132-500	500 g
	78,000	powder	98% hydrolyzed	15130-500	500 g
	78,000	powder	99.7% hydrolyzed	15129-500	500 g
	108,000	powder	99.7% hydrolyzed	04324-500	500 g
	125,000	powder	88% hydrolyzed	04398-500	500 g
	133,000	powder	99% hydrolyzed	02815-500	500 g
Poly(vinyl alcohol), N-methyl-4(4'-formylstyryl) pyridinium methosulfate acetal	45,000	13.3% AQ	photocrosslinkable polymer, high dielectric constant, used in making silkscreen printing screens	22570-75	75 g

	Mol. Weight	Form	Comments	Catalog #	Size
Poly(vinylamine) hydrochloride	25,000	powder	all primary anime	23965-1	1 g
Poly(2-vinyl-1-methylpyridinium bromide)	50,000	20% AQ	degree of quaternization ~50%	21477-10	10 g
Poly(vinyl methyl ether)	~30,000	50% AQ		03032-500	500 g
Poly(vinyl phosphoric acid), sodium salt	200,000	solid	straight chain; 5% phosphorus	04391-5	5 g
Poly(vinylphosphonic acid)	24,000	30% AQ	polydispersity ~1.24	24297-10	10 g
Poly(2-vinylpyridine)	40,000	powder	water-soluble at low pH, adhesive-promoting properties	21382-10	10 g
	200K-400K	powder		19238-10	10 g
	300K-400K	powder		17770-10	10 g
Poly(4-vinylpyridine)	50,000	solid	water-soluble at low pH	00112-50	50 g
	300,000	solid		22176-50	50 g
Poly(2-vinylpyridine N-oxide)	150K-200K	powder	water-soluble cationic resin	01564-10	10 g
Poly(4-vinylpyridine N-oxide)	200,000	powder		23684-10	10 g
Poly(N-vinylpyrrolidone)	2500	powder	water-soluble polymer used as a thickener, protective colloid	16693-250	250 g
	4,000-6,000	powder		24737-250	250 g
	10,000	powder		03315-250	250 g
	40,000	powder		01051-250	250 g
	40,000	powder	pharmaceutical grade	01052-250	250 g
	1,000,000	powder		06067-250	250 g
Poly(N-vinylpyrrolidone/2-dimethylaminoethyl methacrylate), dimethyl sulfate quaternary	100,000	20% AQ	cationic quaternary salt	16294-100	100 g
Poly(N-vinylpyrrolidone/vinyl acetate) [30:70]	25,000		hydrophilic neutral polymer	09718-100	100 g
[50:50]	45,000			09717-100	100 g
[70:30]	66,000			09716-100	100 g
Poly(vinylsulfonic acid) sodium salt	5,000	25% AQ	anionic polymer	04392-100	100 g

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