

Product data summary

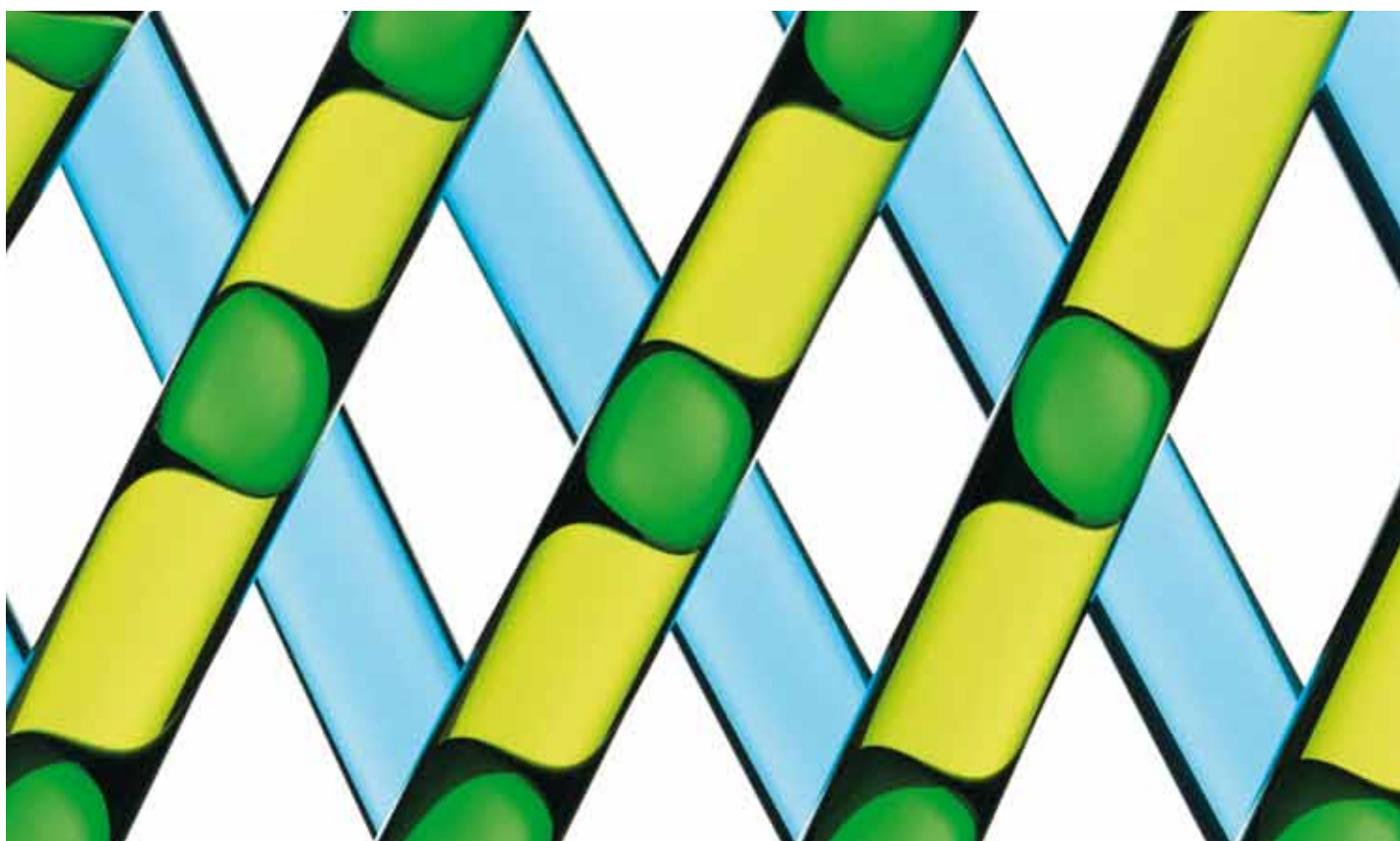


The elements of success

You need a partner who can see the big picture when it comes to your products, your processes and your customers. Our experience and expertise in the special niches of organic chemistry, process technology and application development are at your service, providing you with a complete chain of solutions to enhance quality and profitability at every step.

Our versatile intermediates, an essential element of your winning formula, are specifically designed to add value and enhance end-product performance. Your solution to meeting the increasing demands for safer, lighter, more durable and environmentally friendly end-user products, begins here.

The following is a summary of typical product data. More detailed information and specifications of each product are available on www.perstorp.com or through your Perstorp representative.



Alcohols

	Appearance	Reactive group	Molecular weight (g/mol)	Purity (%) min.	Hydroxyl number (mg KOH/g)	Viscosity mPas (°C)
n-Butanol	Liquid	1 hydroxyl	74.1	99.85		
2-EH (2-Ethylhexanol)	Liquid	1 hydroxyl	130.2	99.5		
Isobutanol	Liquid	1 hydroxyl	74.1	99.6		
CTF (Cyclic Trimethylolpropane Formal)	Liquid	1 hydroxyl	145.9		385	80 (23)

Aldehydes

	Appearance	Reactive group	Molecular weight (g/mol)	Purity (%) min.
Isobutyraldehyde	Liquid	1 aldehyde	72.1	99.0
n-Butyraldehyde	Liquid	1 aldehyde	72.1	99.0
Propionaldehyde	Liquid	1 aldehyde	58.1	99.0
Formalin (conc. 30-50%)	Liquid	1 aldehyde	30.0	

Acids

	Appearance	Reactive group	Molecular weight (g/mol)	Purity (%) min.	Concentration (%)
Formic Acid	Liquid	1 carboxyl	46.0		85.0 ± 1
2-EHA (2-Ethylhexanoic Acid)	Liquid	1 carboxyl	144.2	99.5	
Propionic Acid	Liquid	1 carboxyl	74.1	99.5	
Phthalic Anhydride	Flakes	1 anhydride	148.1	99.8	
PIA (Purified Isophthalic Acid)	Crystals	2 carboxyl	166.1	99.8	

Organic & Inorganic Salts

	Appearance	Molecular weight (g/mol)	Purity (%) min.	Solubility in water 20°C	Concentration (%) min.
Calcium Formate tech	Crystals	130.1	98	Soluble	
Sodium Formate	Crystals	68.0	97	Soluble	
Sodium Formate S	Crystals	68.0	99	Soluble	
Sodium Sulphate	Crystals	142.0	99	Soluble	
Sodium Chloride	Crystals	58.5	98	Soluble	
Potassium Formate 75% in water	Liquid	84	99	Soluble	74

Feed Additives

	Appearance	Active ingredients	Concentration (%)
ProPhorce® AC 200	Solid	Calcium formate	99
ProSid® MI 208	Solid	Calcium propionate	99
ProSid® MI 207	Solid	Sodium propionate	99
Formic Acid agro	Liquid	Formic acid	85
Propionic Acid agro	Liquid	Propionic acid	99.5
Product family	Appearance	Application area	Active ingredients
ProSid® IS	Solid	Immune stimulants	Natural yeasts, minerals
ProSid® MI	Liquid & solid	Mould inhibitors	Organic acids and salts of acids
ProSid® TB	Solid	Toxin binders	Mineral absorbents
ProSid® FL	Liquid	Preservative for liquid feed	Organic acids and salts of acids
ProPhorce® AC	Liquid & solid	Acidifiers for feed	Organic acids and salts of acids
ProPhorce® PH	Liquid & solid	Antibacterials for feed	Organic acids, salts of acids and essential oils
ProPhorce® BD	Liquid & solid	Antibacterials for feed	Organic acids, salts of acids and essential oils
ProPhorce® SA	Liquid & solid	Antibacterials for feed	Organic acids and salts of acids
ProFare® EZ	Liquid & solid	Enzymes for feed	Enzymes
ProTain® OT	Liquid & solid	Antioxidants for pet food & feed	Anti-oxidants
ProTain® NA	Liquid & solid	Natural antioxidants for pet food & feed	Natural anti-oxidants
ProMyr® NT	Liquid	Silage additives - grass	Organic acids and salts of acids
ProMyr® LB	Solid	Silage additives - inoculants	Lactic acid bacteria and enzymes
ProMyr® XR	Liquid	Silage additives - extra requirements	Organic acids and salts of acids
ProMyr® CQ	Liquid	Silage additives - grain	Organic acids and salts of acids
ProMyr® TR	Liquid	Silage additives - TMR stabilizers	Organic acids and salts of acids

Food Additives

	Appearance	Application area	Active ingredients	Solubility in water, 20°C
Profina® CP	Solid	Food preservative	Calcium propionate	Soluble
Profina® SP	Solid	Food preservative	Sodium propionate	Soluble
Acetic Acid	Liquid	Food preservative	Acetic acid	Unlimited

Plasticizers

	Appearance	Molecular weight (g/mol)	Ester content (%) min.	Viscosity mPas (°C)
DOP (Diocetyl Phthalate)	Liquid	390	99.7	80 (23)
Emoltene® 100	Liquid	447	99.5	123 (20)
Emoltene® 244	Liquid	286	98.5	5 (23)

Polyalcohols

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Melting point (°C)
BEPD (Butyl Ethyl Propanediol)	Semi-crystalline	2 hydroxyl	161.0	695	44
BEPD70L	Liquid	2 hydroxyl	146.1	795	< 21
MPD (Methyl Propanediol)	Liquid	2 hydroxyl	90.8	1,230	Liquid
Neo (Neopentyl Glycol)	Flakes	2 hydroxyl	104.2	1,077	129
Neo 90	Liquid (90% in water)	2 hydroxyl	104.2	1,077	35
Trimethylpentanediol	Solid	2 hydroxyl	146.2	765	50
TMP (Trimethylolpropane)	Flakes	3 hydroxyl	135.1	1,247	59
Glycerine tech	Liquid	3 hydroxyl	92.1	1,800	Liquid
Di-TMP (Di-Trimethylolpropane)	Flakes	4 hydroxyl	250.5	895	111
Penta (Pentaerythritol) mono	Crystals	4 hydroxyl	136.4	1,645	260
Penta tech	Crystals	4 hydroxyl	142.5	1,615	248
Penta nitration	Crystals	4 hydroxyl	136.4	1,645	262
Penta ICX	Crystals	4 hydroxyl	136.6	1,645	262
Di-Penta (Di-Pentaerythritol) 93	Crystals	6 hydroxyl	254.1	1,325	222
Di-Penta 90	Crystals	6 hydroxyl	255.0	1,320	222

Micronized Polyalcohols

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Melting point (°C)
Di-TMP micronized	Powder < 250 µm	4 hydroxyl	250.5	895	111
Penta mono micronized	Powder < 40 µm	4 hydroxyl	136.4	1,645	262
Penta tech micronized	Powder < 40 µm	4 hydroxyl	142.5	1,615	248
Di-Penta micronized	Powder < 40 µm	6 hydroxyl	254.1	1,325	222
Di-Penta super micronized	Powder < 15 µm	6 hydroxyl	254.1	1,325	222

Alkoxyated Polyalcohols

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Viscosity (mPas, 23°C)
Polyol R2490	Liquid	2 hydroxyl	220	490	170
Polyol 3165	Liquid	3 hydroxyl	1,014	165	350
Polyol 3380	Liquid	3 hydroxyl	444	380	360
Polyol 3610	Liquid	3 hydroxyl	275	610	700
Polyol 3611	Liquid	3 hydroxyl	275	611	700
Polyol 3940	Liquid	3 hydroxyl	179	940	4,000
Polyol 3990	Liquid	3 hydroxyl	170	990	4,500
Polyol R3215	Liquid	3 hydroxyl	795	215	340
Polyol R3430	Liquid	3 hydroxyl	398	430	400
Polyol R3530	Liquid	3 hydroxyl	308	530	2,000
Polyol R3540	Liquid	3 hydroxyl	310	540	550
Polyol R3600	Liquid	3 hydroxyl	275	600	700
Polyol 4290	Liquid	4 hydroxyl	797	290	450
Polyol 4360	Liquid	4 hydroxyl	629	360	1,300
Polyol 4525	Liquid	4 hydroxyl	426	525	2,600
Polyol 4640	Liquid	4 hydroxyl	355	640	1,100
Polyol 4800	Liquid	4 hydroxyl	282	800	2,200
Polyol R4630	Liquid	4 hydroxyl	350	630	1,500
Polyol R4631	Liquid	4 hydroxyl	356	631	1,500
Polyol R6405	Liquid	6 hydroxyl	827	405	1,900

Nonionic Diol

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Viscosity (mPas, 50°C)
Ymer® N120	Amorphous	2 hydroxyl	1000	110	60

Hydroxy Acids

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Acid number (mg KOH/g)
Bis-MPA (Dimethylolpropionic Acid)	Crystals	2 hydroxyl, 1 carboxyl	134.4	835	415
DMBA (Dimethylolbutanoic Acid)	Crystals	2 hydroxyl, 1 carboxyl	148.2	755	377

Allyl Ethers

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Viscosity (mPas, 23°C)
APE (Allyl Pentaerythritol)	Liquid	1 hydroxyl, 3 allyl	255.5	240	20
TMPDE 80 (Trimethylolpropane Diallyl Ether)	Liquid	1 hydroxyl, 2 allyl	210.7	300	15
TMPDE 90 (Trimethylolpropane Diallyl Ether)	Liquid	1 hydroxyl, 2 allyl	213.9	265	20
TMPME (Trimethylolpropane Monoallyl Ether)	Liquid	2 hydroxyl, 1 allyl	174.2	640	130

Caprolactone Monomer

	Appearance	Reactive group	Molecular weight (g/mol)	Purity (%) min.	Viscosity (mPas, 20°C)
Capa® Monomer	Liquid	1 lactone	114.1	99.9	7

Caprolactone Polyols

	Appearance	Reactive group	Molecular weight (g/mol)	Polymer chemistry	Hydroxyl number (mg KOH/g)
Capa® 2043	Liquid	2 hydroxyl	400	Polyester	280
Capa® 2054	Liquid/paste	2 hydroxyl	550	Polyester	204
Capa® 2101A	Paste/wax	2 hydroxyl	1,000	Polyester	112
Capa® 2161A	Wax	2 hydroxyl	1,600	Polyester	70
Capa® 2200	Wax	2 hydroxyl	2,000	Polyester	56
Capa® 2201	Wax	2 hydroxyl	2,000	Polyester	56
Capa® 2201A	Wax	2 hydroxyl	2,000	Polyester	56
Capa® 2203A	Wax	2 hydroxyl	2,000	Polyester	56
Capa® 2204J	Wax	2 hydroxyl	2,000	Polyester	56
Capa® 2205	Wax	2 hydroxyl	2,000	Polyester	56
Capa® 2302A	Wax	2 hydroxyl	3,000	Polyester	37
Capa® 2402	Wax	2 hydroxyl	4,000	Polyester	28
Capa® 2403D	Wax	2 hydroxyl	4,000	Polyester	28
Capa® 2803	Wax	2 hydroxyl	8,000	Polyester	14
Capa® 3031	Liquid	3 hydroxyl	300	Polyester	540
Capa® 3031A	Liquid	3 hydroxyl	300	Polyester	540
Capa® 3050	Liquid	3 hydroxyl	540	Polyester	310
Capa® 3201	Wax	3 hydroxyl	2,000	Polyester	84
Capa® 4101	Liquid	4 hydroxyl	1,000	Polyester	218
Capa® 7201A	Paste/wax	2 hydroxyl	2,000	Polyester: Polyether	56
Capa® 7203	Paste/wax	2 hydroxyl	2,000	Polyester: Polycarbonate	56

Thermoplastic Polycaprolactones

	Appearance	Reactive group	Molecular weight (g/mol)	Melt flow index (MFI) dg/min (°C)	Melting point (°C)
Capa® 6100	Wax	Hydroxyl	10,000	N/A	58-60
Capa® 6250	Granule	Hydroxyl	25,000	9 (80)	58-60
Capa® 6400	Granule	Hydroxyl	37,000	40 (160)	58-60
Capa® 6430	Granule	Hydroxyl	43,000	13 (160)	58-60
Capa® 6500	Granule	Hydroxyl	50,000	7 (160)	58-60
Capa® 6506	Powder	Hydroxyl	50,000	7 (160)	58-60
Capa® 6800	Granule	Hydroxyl	80,000	3 (160)	58-60

Coalescing Agents

	Appearance	Type	Boiling point (°C)	Viscosity (mPas, 23°C)
NX 795	Liquid	Ester alcohol	255	13
NX 800	Liquid	Ester	282	5

Speciality Polymers

	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Viscosity Pas (°C)
Dendritic Polymers					
Boltorn® H20	Solid	16 hydroxyl	2,100	515	7 (110)
Boltorn® H311	Viscous liquid	Hydroxyl groups	5,700	245	40 (23)
Boltorn® H2004	Viscous liquid	6 hydroxyl	3,200	120	15 (23)
Boltorn® P500	Viscous liquid	Hydroxyl groups	1,800	600	12 (23)
Boltorn® P1000	Viscous liquid	Hydroxyl groups	1,500	470	5 (23)
Boltorn® W3000	Semi-crystalline	Non ionic, air drying	9,000	15	5 (35)
Boltorn® U3000	Liquid	Air drying	6,500	15	1 (23)
Polycarbonate diols					
Oxymer® M112	Viscous liquid	2 hydroxyl	1,000	112	20 (40)
Oxymer® M56	Viscous liquid	2 hydroxyl	1,700	56	55 (40)
Oxymer® C112	Viscous liquid	2 hydroxyl	1,500	112	40 (40)
Polyester polyols					
Robrac® 650	Semi-solid	5 hydroxyl	480	700	35 (50)
Robrac® 675	Liquid (75% in water)	5 hydroxyl	480	700	0.5 (23)
Robrac® 1200	Liquid	4 hydroxyl	Blend	1,150	18 (23)

Products for Intumescent Coatings

	Appearance	Monopenta content (%)	Di-Penta content (%)	Water solubility (%)
Charmor® PM40	Powder < 40 µm	99		5.3
Charmor® PT40	Powder < 40 µm	91	7	4.7
Charmor® DP40	Powder < 40 µm		95	0.2
Charmor® PM15	Powder < 15 µm	99		5.3
Charmor® DP15	Powder < 15 µm		95	0.2

Isocyanate Monomers

	Isocyanate type	Hydrolysable chlorine (ppm)	Total chlorine (ppm)	Assay (%)
HDI (Hexamethylene diisocyanate)	Aliphatic	< 350	< 1,000	> 99.5
IPDI (Isophorone diisocyanate)	Cycloaliphatic	< 200	< 400	> 99.5
Scuranate® T80 (Toluene diisocyanate, 80% 2,4 TDI)	Aromatic	< 70	< 300	> 99.5
Scuranate® T65 (Toluene diisocyanate, 68% 2,4 TDI)	Aromatic	< 100	< 300	> 99.5
Scuranate® T100 (Toluene diisocyanate, > 99% 2,4 TDI)	Aromatic	< 150	< 700	> 99.5

Aliphatic Polyisocyanates for Waterborne PU Formulations

	Viscosity (mPas)	NCO (%)	Solids content (approx., %)	APEO-free without nonyl phenol ethoxylate
For mono-component (1K) thermosetting formulation				
Easaqua™ WT 1000	3,200	9.4	63	
For two-component (2K) coating formulations				
Easaqua™ WT 2102	4,300	19.0	100	
Easaqua™ X M 501	1,100	21.6	100	•
Easaqua™ X M 502	3,600	18.3	100	•
Easaqua™ X D 401	1,050	15.8	85	•
Easaqua™ X D 803	200	12.2	69	•
For two-component (2K) adhesives, leather, textile & paper				
Easaqua™ WAT	4,000	19.0	100	
Easaqua™ WAT-1	1,400	21.7	100	
Easaqua™ X WAT-3	1,150	21.5	100	•
Easaqua™ X WAT-4	4,000	18.6	100	•

Aliphatic Polyisocyanates for Solvent-based & High Solids Formulations

	Viscosity (mPas, 25°C)	NCO (%)	Free monomer (%)	Solids content (%)	Solvent type	Flash point (°C)	Equivalent weight (g)
HDI biurets							
Tolonate® HDB	9,000 ± 2,000	22.0 ± 1.0	< 0.3	100	-	> 120	191
Tolonate® HDB 75 B	150 ± 100	16.5 ± 0.5	< 0.3	75 ± 1	B	35	255
Tolonate® HDB 75 BX	150 ± 100	16.5 ± 0.5	< 0.3	75 ± 1	BX	35	255
Tolonate® HDB 75 M	250 ± 100	16.5 ± 0.5	< 0.3	75 ± 1	M	55	255
Tolonate® HDB 75 MX	250 ± 100	16.5 ± 0.5	< 0.3	75 ± 1	MX	38	255
Tolonate® HDB-LV	2,000 ± 500	23.5 ± 1.0	< 0.3	100	-	> 120	179
HDI trimers							
Tolonate® HDT	2,400 ± 400	22.0 ± 0.5	< 0.2	100	-	> 120	191
Tolonate® HDT 90	500 ± 100	19.8 ± 0.7	< 0.2	90 ± 1	SB	53	212
Tolonate® HDT 90 B	450 ± 100	20.0 ± 1.0	< 0.2	90 ± 1	B	48	210
Tolonate® X FD 90 B	2,000 ± 1,000	17.4 ± 0.6	< 0.5	90 ± 1	B	48	240
Tolonate® HDT-LV	1,200 ± 300	23.0 ± 1.0	< 0.2	100	-	> 120	183
Tolonate® HDT-LV2	600 ± 150	23.0 ± 1.0	< 0.5	100	-	> 120	183
Blocked isocyanate							
Tolonate® D2	3,250 ± 750	11.2	-	75 ± 2	S	49	370
IPDI trimers							
Tolonate® IDT 70 S	1,830 ± 540	12.3 ± 1.0	< 0.5	70 ± 2	S	45	342
Tolonate® IDT 70 B	600 ± 300	12.3 ± 1.0	< 0.5	70 ± 2	B	29	342

B = butyl acetate X = xylene M = methoxypropyl acetate S = aromatic hydrocarbon

Bio-based Esters

	Appearance	Melting point (°C)	Boiling point (°C)	Density (kg/m ³)
RME (Rapeseed Oil Methyl Ester)	Liquid	<-15	280-350	883

Oxetanes

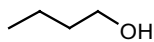
	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Viscosity mPas (°C)
TMPO (Trimethylolpropane Oxetane)	Liquid	1 hydroxyl, 1 oxetane	115.2	485	25 (23)

Other Products

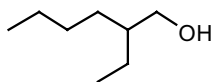
	Appearance	Reactive group	Molecular weight (g/mol)	Hydroxyl number (mg KOH/g)	Viscosity mPas (°C)
Polyol PX	Semi-crystalline	2.7 hydroxyl	180	840	650 (50)
Polyol PX 70	Liquid (70 % in water)	2.7 hydroxyl	180	840	25 (23)
Polyol TD	Liquid	1.8 hydroxyl	144	700	150 (23)
	Appearance	Molecular weight (g/mol)	Purity (%) min.		
m-Xylene	Liquid	106.2	99.3		



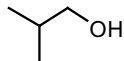
n-Butanol



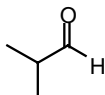
2-Ethylhexanol



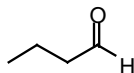
Isobutanol



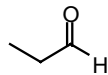
Isobutylaldehyde



n-Butylaldehyde



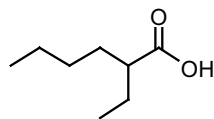
Propionaldehyde



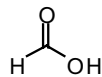
Formaldehyde



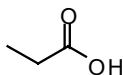
2-EHA
(2-Ethylhexanoic Acid)



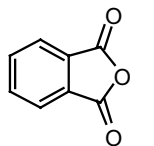
Formic Acid



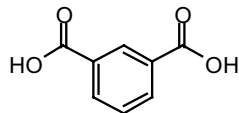
Propionic Acid



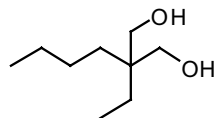
Phthalic Anhydride



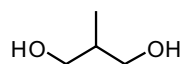
Purified Isophthalic Acid



BEPD
(Butyl Ethyl Propanediol)



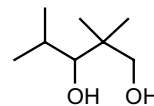
MPD
(Methyl Propanediol)



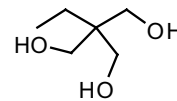
Neo
(Neopentyl Glycol)



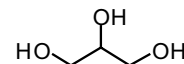
Trimethylpentanediol



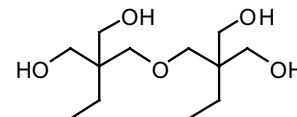
TMP
(Trimethylolpropane)



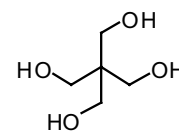
Glycerine tech



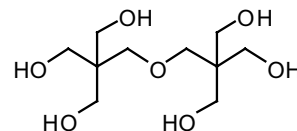
Di-TMP
(Di-Trimethylolpropane)



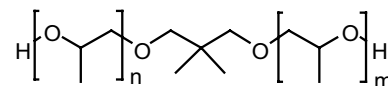
Penta
(Pentaerythritol)



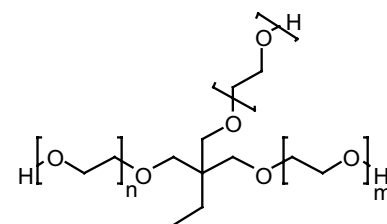
Di-Penta
(Di-Pentaerythritol)



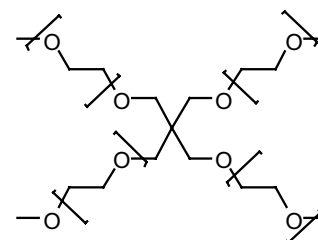
Difunctional propoxylated polyol



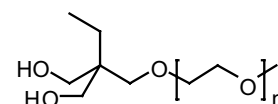
Trifunctional ethoxylated polyol



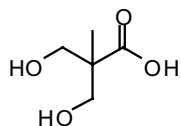
Tetrafunctional ethoxylated polyol



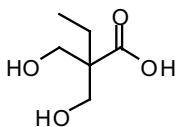
Nonionic Diol



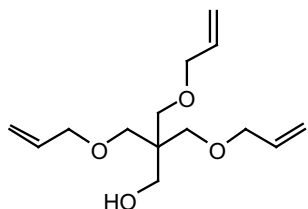
Bis-MPA
(Dimethylolpropionic Acid)



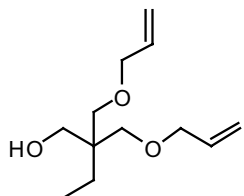
DMBA
(Dimethylolbutanoic Acid)



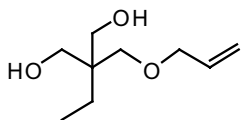
APE



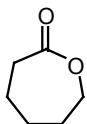
TMPDE
(Trimethylolpropane Diallyl Ether)



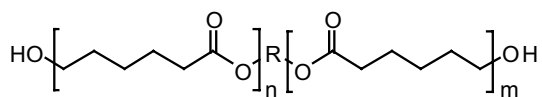
TMPME



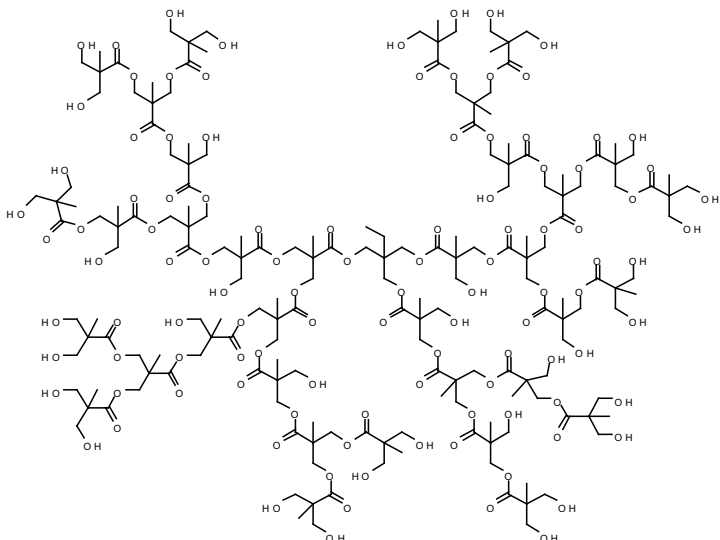
Caprolactone



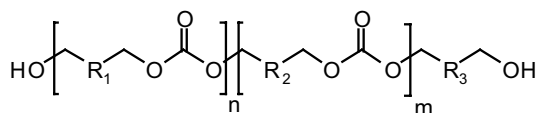
Polycaprolactone



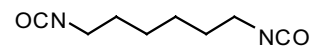
Dendritic polymer



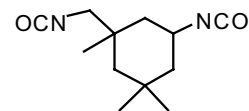
Polycarbonate diol



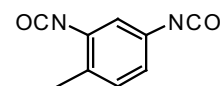
HDI



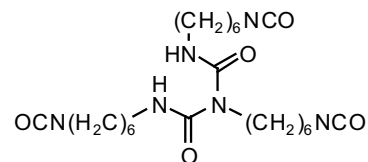
IPDI



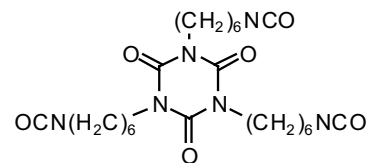
TDI



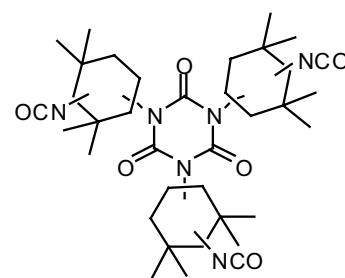
HDI biuret



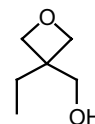
HDI trimer



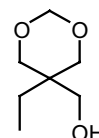
IPDI trimer



TMPO
(Trimethylolpropane Oxetane)



CTF
(Cyclic Trimethylolpropane Formal)





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