

PP Chemical Resistance Guide

Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
A				Barium sulfide	S	S	S
Acetic acid (10%)	S	S		Beer	S	S	
Acetic acid (50%)	S	S	O	Beet Juice	S	S	O
Acetic acid (100%)	S	S		Benzaldehyde	S	S	
Acetic anhydride	S	S		Benzene	O	U	U
Acetone	S	S		Benezene Sulfonic Acid, 10%	S	S	S
Acetonitrile	S			Benzoic Acid	S		
Acetophenone	O	O	U	Benzyl alcohol	S	S	
Almond Oil	S	S		Benzyl chloride	S	S	
Aluminum ammonium sulfate	S	S		Bismuth carbonate	S	S	
Aluminum chloride	S	S	O	Bluing	S	S	S
Aluminum fluoride	S	S		Borax	S	S	S
Aluminum hydroxide	S	S		Boric acid	S	S	
Aluminum nitrate	S	S	S	Brandy	S	S	
Aluminum potassium sulfate	S	S		Brake fluid	S	O	
Alums (all types)	S	S		Brine	S	S	S
Ammonia (anhydrous)	S	S		Bromic acid	U	U	
Ammonia (30% aqueous)	S	S		Bromine	U	U	
Ammonium bi-fluoride	S	S		Bromine water	U	U	
Ammonium carbonate	S	S	S	Butane	O		
Ammonium chloride	S	S	O	Butyl acetate	U	U	
Ammonium fluoride (25%)	S	S		Butyl acrylate	U	U	
Ammonium hydroxide	S	S		Butyl alcohol	S	S	
Ammonium nitrate	S	S	S	Butyl Phthalate	S	S	S
Ammonium sulfate	S	S	S	C			
Ammonium sulfide	S	S		Calcium bisulfate	S	S	
Ammonium thiocyanate	S	S		Calcium carbonate	S	S	S
Amyl acetate	O	U		Calcium chlorate	S	S	
Amyl alcohol	S	O	U	Calcium chloride	S	S	O
Amyl chloride	U	U		Calcium hydroxide	S	S	S
Aniline	S	S	O	Calcium hypochlorite	S	S	
Anisole	O	O	U	Calcium nitrate	S	S	
Antimony trichloride	S	S		Calcium soap grease	S	O	
Apple Juice	S	S	S	Calcium sulfate	S	S	
Aqua regia	O	O		Calgonite (1%)	S	S	
Arsenic acid	S	S		Camphor Oil	U	U	U
Aviation fuel	O	O		Carbon dioxide (dry)	S	S	
B				Carbon dioxide (wet)	S	S	
Barium carbonate	S	S		Carbon disulfide	O	U	
Barium chloride	S	S	O	Carbon monoxide	S	S	
Barium hydroxide	S	S		Carbon tetrachloride	U	U	
Barium soap grease	S	O		Carbonic acid	S	S	
Barium sulfate	S	S		Castor oil	S	S	
				Caustic Soda, conc.	S	S	S
				Cellosolve	S	S	

Legend: S = Satisfactory O = Some attack U = Unsatisfactory

PP Chemical Resistance Guide

Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
Cetyl alcohol	S			Ethylene chloride	U	U	
Chlorine (dry)	U	U		Ethylene chlorohydrin	S	S	
Chlorine (wet)	O	U		Ethylene dichloride	S		
Chloroacetic acid	S			Ethylene glycol	S	S	
Chlorobenzene	U	U		Ethylene oxide	S		
Chloroform	O	U		F			
Chlorosulfonic acid	U	U		Ferric chloride	S	S	
Chromic acid (10%)	S	S		Ferric nitrate	S	S	
Chromic acid (50%)	S	S		Ferric sulfate	S	S	
Chromic acid (80%)	S			Ferrous chloride	S	S	
Cider	S	S		Ferrous nitrate	S	S	O
Citric acid	S	S		Ferrous sulfate	S	S	
Clorox	S	S	S	Fluorine	U	U	
Clove Oil	O	U	U	Fluosilicic acid	S	S	
Copper chloride	S	S		Formaldehyde	S	S	O
Copper cyanide	S	S		Formic acid (10%)	S	S	
Copper fluoride	S	S		Formic acid (100%)	S		
Copper nitrate	S	S		Freon (12, 22)	U		
Copper sulfate	S	S		Fructose	S	S	
Corn oil	S	S		Fruit juice	S	S	
Cottonseed oil	S	S		Fuel oil	O	O	
Cresol	S	S		Furfural	U	U	
Cuprous chloride	S	S		G			
Cyclohexane	S	O		Gasoline	O	U	
Cyclohexanol	S	O		Gelatin	S	S	
Cyclohexanone	O	U		Glucose	S	S	
D				Glycerol	S	S	S
Decalin	U	U		Glycol	S	S	O
Developers (photographic)	S	S		Glycolic acid	S	S	
Dextrin	S	S		H			
Dibutyl phthalate	S	S		Heptane	U	U	U
Dichloroethylene	S			Hexadecyl alcohol	S	S	
Diethanolamine	S	S		Hexane	O	U	
Diethyl ether	O	O		Hydrobromic acid (50%)	S	S	
Diglycolic acid	S	S		Hydrochloric acid (20%)	S	S	O
Diisooctyl phthalate	S	S		Hydrochloric acid (100%)	S	S	O
Dimethyl phthalate	S	S		Hydrofluoric acid (35%)	S	O	
Dioctyl Phthalate	U	U	U	Hydrogen chloride gas (dry)	S	S	
p-Dioxane	S	O		Hydrogen peroxide (30%)	S	O	
E				Hydrogen peroxide (90%)	O	O	U
Ethanolamine	S	S		Hydrogen sulfide	S	S	
Ethyl acetate	S	S		Hydroiodic acid	U	U	
Ethyl alcohol	S	S	S	Hydroquinone	S	S	
Ethylamine	S	S		I			
Ethyl chloride	O	O		Igepal	S	S	
Ethyl ether	O	O					

Legend: S = Satisfactory O = Some attack U = Unsatisfactory

PP Chemical Resistance Guide

Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)	Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
Iodine (dry)	S	S		Motor oil	S	S	
Iodine (wet)	U			Mustard Paste	S		
Isooctane	U			N			
Isopropyl alcohol	S	S		Naphtha	S	S	
J				Naphthalene	S	S	S
Jet fuel (JP-4 and JP-5)	O	U		Neat's Foot Oil	S		
K				Nickel chloride	S	S	
Kerosene	O	U		Nickel nitrate	S	S	O
L				Nickel sulfate	S	S	S
Lactic acid	S	S		Nitric acid (10%)	S	S	S
Lacquer	S			Nitric acid, conc.	O	U	
Lanolin	S	S		Nitric acid (fuming)	U		
Lead acetate	S	S	S	Nitric/sulfuric acid (50/50)	U		
Lemon oil	O			Nitrobenzene	S	O	
Ligroin	S			Nitrous acid	O		
Lime Sulfur	S			Nutmeg Oil	U	U	U
Linseed oil	S	S		O			
Lubricating oil	S	O		Oleic acid	S	S	
Lye	S			Oleum	U		
M				Olive oil	S	S	
Magnesium carbonate	S	S	S	Orange Juice	S		
Magnesium chloride	S	S	O	Oxalic acid	S	S	
Magnesium hydroxide	S	S	S	Oxygen	U	U	
Magnesium nitrate	S	S		Ozone	U	U	
Magnesium sulfate	S	S		P			
Magnesium sulfite	S	S		Palmitic Acid	S	S	S
Malic acid	S	O		Paradichlorobenzene	S	S	
Maple Syrup	S			Peanut oil	S	S	
Mayonnaise	S			Perchloroethylene	U	U	
Mercuric chloride	S	S		Phenol (10%)	S	S	O
Mercuric cyanide	S	S		Phosgene (gas)	U	U	
Mercuric nitrate	S	S		Phosgene (liquid)	U	U	
Mercurochrome	S			Phosphoric acid (30%)	S	S	O
Mercury	S	S		Phosphoric (85%)	S	S	O
Merthiolate (tincture)	S	S		Phosphorus	S		
Methane	S	S		Phthalic acid	S		
Methanol	S	S		Picric Acid	S		
Methyl cellosolve	S			Polyvinyl acetate	S		
Methyl chloride	U			Potassium bromide	S	S	S
Methylene chloride	S	O		Potassium carbonate	S	S	S
Methyl ethyl ketone	S	S		Potassium chlorate	S	S	O
Methyl isobutyl ketone	S	S		Potassium cyanide	S	S	
Methylsulfuric acid	S	S		Potassium dichromate	S	S	S
Milk	S	S		Potassium ferrocyanide	S	S	
Mineral oil	S	U		Potassium hydroxide	S	S	S
Molasses	S			Potassium nitrate	S	S	

Legend: S = Satisfactory O = Some attack U = Unsatisfactory

PP Chemical Resistance Guide

Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
Potassium permanganate	S	O	
Potassium sulfate	S	S	S
Potassium sulfide	S	S	S
Propanol	S	S	
Pyridine	S		
R			
Rice Bran Oil	S	S	
Rosin, light	S		
S			
Safflower Oil	S	O	
Sauerkraut	S		
Shellac	S		
Silicone Oil	S		
Silver cyanide	S	S	
Silver nitrate	S	S	S
Sodium acetate	S	S	
Sodium benzoate	S	S	S
Sodium bicarbonate	S	S	
Sodium bisulfate	S	S	
Sodium bisulfite	S	S	
Sodium bromide	S	S	
Sodium carbonate	S	S	S
Sodium chlorate	S	S	O
Sodium chloride	S	S	O
Sodium cyanide	S	S	
Sodium hydroxide, conc.	S	S	S
Sodium Hypochlorite, conc.	S	O	U
Sodium Nitrate	S	S	S
Sodium Perborate	S		
Sodium Phosphate	S	S	S
Sodium sulfate	S	S	
Sodium sulfite	S	S	
Sodium Thiosulfate	S	S	
Soybean Oil	S	S	
Stannic chloride	S	S	
Stannous chloride	S	S	
Starch	S	S	
Styrene	U	U	U
Sucrose (20%)	S	S	
Sulfamic acid	S	S	
Sulfur	O	U	U
Sulfur Chloride	O	U	U
Sulfuric acid (10%)	S	S	S
Sulfuric acid (50%)	S	S	
Sulfuric acid, conc.	S	O	U
Sulfuric acid (fuming)	U	U	

Reagent	70°F (21°C)	140°F (60°C)	212°F (100°C)
T			
Tannic acid (10%)	S	S	
Tartaric Acid	S	S	S
Tea	S	S	S
Tetrahydrofuran	S	S	O
Tetralin	O	O	O
Toluene	U	U	
Tomato Juice	S	S	S
Tomato Soup	S	S	S
Tributyl phosphate	S	O	
Trichloroacetic Acid	S	O	
Trichloroethylene	U	U	
Tricresyl phosphate	S	S	
Triethanolamine	O	O	
Trisodium phosphate	S	S	
Turpentine	S	O	O
U			
Urea	S	S	
Urine	S	S	
V			
Vanilla	S	S	
Varnish	S		
Vaseline	S	O	O
Vinegar	S	S	
W			
Water	S	S	O
Wheat Germ Oil	S	S	
Whiskey	S	S	S
White Spirits	U	U	U
Wines	S	S	
X			
Xylene	O	U	
Xylol	S		
Y			
Yeast	S	S	
Z			
Zinc chloride	S	S	
Zinc oxide	S	S	
Zinc sulfate	S	S	

Legend: S = Satisfactory O = Some attack U = Unsatisfactory



PP Chemical Resistance Guide

Note: The proceeding information concerns general chemical resistance only. Since other factors such as permeation, ESCR and container design are involved, full compatibility testing is recommended. Staining is not considered in this evaluation.

Product inquiries:

Marina View Headquarters

2600 South Shore Blvd.

Suite 500

League City, Texas 77573

Telephone: [REDACTED]

Fax: [REDACTED]

Customer Service: [REDACTED]

Battleground Manufacturing Complex

1230 Independence Parkway South

La Porte, Texas 77571

Telephone: [REDACTED]

Fax: [REDACTED]

Technical Center: [REDACTED]

www.ineos-op.com

<http://ordersonline.ineos-op.com>

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. As conditions of use may vary and are beyond the control of INEOS Olefins & Polymers USA, no representations or warranty, express or implied, are made with respect to the accuracy, reliability, or completeness of the this information. This information in no way modifies, amends, enlarges, or creates any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED. INEOS Olefins & Polymers USA shall not be responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices, or from hazards inherent in the nature of the product and/or material, nor for toxicological effects or Industrial Hygiene associated with particular use of any product described herein. This information relates only to the specific product and/or material designated and may not be valid for such product and/or material used in combination with any other product and/or material or in any process, unless otherwise specified. This information shall not be construed as a recommendation for any use that may infringe any patent, trademark, or the like, or as an endorsement of any material, equipment, service, or other item not supplied by INEOS Olefins & Polymers USA.

The name and logo INEOS are trademarks of the INEOS Group and its affiliated companies and businesses.

© INEOS Olefins & Polymers USA February, 2012

Legend: S = Satisfactory O = Some attack U = Unsatisfactory

5 of 5

INEOS
Olefins & Polymers USA