

## CHEMICAL COMPATIBILITY OF TECHTHANE®

The chemical compatibility ratings below are intended to serve as a general guide in evaluating the suitability of TECHTHANE products for a particular environment. The ratings shown below are based on laboratory tests, technical literature, and actual service performance, and for aromatic urethanes under long-term exposure. With aliphatic urethanes and short-term exposure, resistance is typically higher. These ratings are only a general indication of the chemical resistance of TECHTHANE, since resistance to a particular chemical also depends on concentration, temperature, exposure time, and the specific TECHTHANE product used. Technical Urethanes, Inc. strongly advises the user to perform tests under actual service conditions prior to full-scale use.

Unless otherwise specified, the following ratings are at room temperature, with aqueous solutions saturated and chemicals at reagent strength:

<u>CHEMICAL</u>	<u>LONG-TERM EXPOSURE</u>				
Acetaldehyde	P	ASTM reference Fuel C	P	Chromium Potassium Sulfate	F
Acetic acid 20%	F	Atlantic Oil	G	Citric Acid Solutions	G
Acetic acid 30%	P	Barium Carbonate	G	Copper Chloride Solutions	G
Acetic acid, glacial	P	Barium Hydroxide	G	Copper Sulfate Solutions	G
Acetic anhydride	P	Benzaldehyde	P	Cottonseed Oil	G
Acetone	P	Benzene	P	Creosol Oil	F
Acetyl Bromide	P	Benzoic Acid	F	Cupric Chloride	G
Acetyl Chloride	P	Borax Solutions	G	Cupric Nitrate	G
Acetylene	F	Boric Acid Solutions	G	Cupric Sulfate	G
Adipic Acid	G	Bromine	F	Cyclohexane	F
Aluminum Chloride Solutions	F	Bunker Oil	G		
Aluminum Sulfate Solutions	G	Butane	G	Dibutyl Ether	G
Ammonia, Anhydrous	F	Butyl Acetate	P	Dibutyl Phthalate	P
Ammonium Acetate	G	Butyl Alcohol	F	Diester Oil	G
Ammonium Carbonate	G	Butyraldehyde	F	Diethyl Sebacate	P
Ammonium Chloride Solutions	F	Calcium Bisulfite Solutions	G	Dimethyl Acetamide	P
Ammonium Hydroxide Solutions	G	Calcium Chloride Solutions	P	Dimethylformamide	P
Ammonium Nitrate	F	Carbonate Calcium	G	Diocetyl Phthalate	P
Ammonium Persulfate	G	Calcium Hydroxide	G	Dodecyl Mercaptan	G
Ammonium Sulfate Solutions	G	Calcium Hypochlorite, 5%	P	DOWTHERM® A	F
Ammonium Sulfide	G	Calcium Nitrate	G	DTE Oil (heavy-medium)	G
Ammonium Thiocyanate	G	Calcium Sulfate	G		
Amyl Acetate	P	Carbon Dioxide	G	ESSO #90 Lube Oil	G
Amyl Alcohol	P	Carbon Disulfide	F	Ether	F
Amyl Chloride	P	Carbon Monoxide	G	Ethyl Acetate	P
Aniline	P	Carbon Tetrachloride	P	Ethyl Alcohol	P
Aniline Hydrochloride	P	Castor Oil	G	Ethyl Bromide	P
Animal Fats & Oils	G	Chlorine	P	Ethyl Chloride	P
Antimony Salts	G	Chlorinated Water @ 2 ppm	G	Ethyl Ether	P
Aqua Regia	P	Chlorinated Water @ 4 ppm	F	Ethylene Dichloride	P
Arsenic Salts	G	Chlorinated Water @ 20 ppm	P	Ethylene Glycol	F
ASTM Oil #1	G	Chloroacetic Acid	P	Ferric Chloride Solutions	P
ASTM Oil #2	G	Chlorobenzene	P	Ferric Nitrate	G
ASTM Oil #3	F	Chloroform	P	Ferrous Chloride	G
ASTM reference Fuel A	G	Chlorosulfonic Acid	P	Ferrous Sulfate	G
ASTM reference Fuel B	F	Chromic Acid, 10-50%	P	Formaldehyde	P

Formic Acid	P	Naphtha	F	Sodium Silicate	G
Freon 11	F	Naphthalene	F	Sodium Sulfate	G
Freon 12	G	Natural Gas	G	Sodium Sulfide	G
Freon 22	P	Nitric Acid	P	Soybean Oil	F
Freon 113	G	Nitrobenzene	P	Stearic Acid	G
Freon 114	F	Nitrogen	G	Stoddard Solvent	G
Fuel Oil	F			Styrene	P
Furfural	P	Oleic Acid	F	Sulfur Dioxide	F
		Oxalic Acid	G	Sulfuric Acid up to 10%	G
Gasoline	F			Sulfuric Acid 10-50%	F--P
Glycerin	G	Palmitic Acid	G	Sulfuric Acid, fuming	P
Glycolic Acid	F	Perchloric Acid	P	Sulfurous Acid	F
		Perchloroethylene	P	Tannic Acid 10%	G
Heptane	F	Petroleum	G	Tartaric Acid	G
Hexane	F	Phenol	P	Tetrahydrofuran	P
Hydrazine	P	Phosphoric Acid 20%	G	Tin Salts	G
Hydraulic Oils	F	Phosphoric Acid 60%	G	Titanium Salts	G
Hydrochloric Acid 20%	F	Phosphoric Acid 85%	P	Toluene	P
Hydrochloric Acid 37%	P	Picric Acid	F	Transformer Oil	F
Hydrocyanic Acid	F	Potassium Cyanide	G	Tributyl Phosphate	P
Hydrofluoric Acid 48%	P	Potassium Dichromate Sol.	G	Trichloroethylene	P
Hydrogen	G	Potassium Hydroxide Sol	F	Tricresyl Phosphate	F
Hydrogen Peroxide	F	Potassium Salts	G	Triethanolamine	P
Hydrogen Sulfide	P	Propane	G	Trisodium Phosphate Solutions	G
Hydriodic Acid	F	Propylene Glycol	F	Tung Oil	F
		Purple Stuff®	G	Turpentine	P
Iodine Solutions	F	Pydraul Oil	P		
Isoctane	F			Vegetable Oil	G
Isopropyl Alcohol	P	SAE #10 Oil	F		
Isopropyl Ether	F	Sea Water	G	Xanthate	G
		Silicic Acid	G	Xylene	P
JP-4	P	Silicone Grease	P		
JP-5	P	Silver Nitrate	G	Zinc Chloride Solutions	G
JP-6	P	Simple Green®	G	Zinc Sulfate	G
		SKYDROL® 500	P		
Kerosene	P	Soap Solutions	G		
		Sodium Acetate	G		
Lacquer Solvents	P	Sodium Bicarbonate	G		
Lactic Acid	F	Sodium Bisulfate	G		
Lead Acetate	F	Sodium Borate	G		
Linseed Oil	F	Sodium Carbonate	G		
Lubricating Oils	F	Sodium Chloride	G		
		Sodium Chloride Solutions	G		
Magnesium Chloride Solutions	G	Sodium Cyanide	G		
Magnesium Hydroxide Solutions	G	Sodium Dichromate 20%	G		
Maleic acid	P	Sodium Ferrocyanide	G		
Mercury	G	Sodium Fluoride	F		
Methyl Alcohol	P	Sodium Hydrosulfite	G		
Methyl Ethyl Ketone	P	Sodium Hydroxide 20%	G		
Methylene Chloride	P	Sodium Hydroxide 50%	P		
Mineral Oil	G	Sodium Hypochlorite	P		
Mobil Arctic Oil	G	Sodium Nitrate	G		
		Sodium Peroxide Solutions	P		

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