



# Rubber Hose Chemical Resistance Chart

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# Rubber Chemical Resistance Chart

- E - Excellent Resistance - suitable for continuous service - chemical may cause hose tube deterioration over time**
- G - Good Resistance - generally suitable for continuous service and intermittent service - chemical will cause hose tube deterioration over time**
- C - Conditional Resistance - suitable for intermittent service only - chemical will cause hose tube deterioration in a shorter time frame.**
- X - Not recommended**
- I - Insufficient data**

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Acetaldehyde	70	G	C	E	E	C	C	X	E	X	E	E	E
Acetamide	70	X	X	E	E	E	E	E	E	G	E	E	E
Acetic Acid (25%)	70	X	X	G	E	X	X	X	E	C	E	G	E
Acetic Acid (50%)	70	X	X	G	E	X	X	X	E	X	E	G	E
Acetic Acid Dilute	70	X	X	X	X	X	X	X	E	X	E	I	E
Acetic Acid, 10%	70	G	G	G	E	G	G	C	E	C	E	G	E
Acetic Acid, 30%	70	G	G	G	E	G	G	C	E	C	E	I	E
Acetic Acid, 50%	70	C	C	G	G	G	G	X	E	C	E	G	E
Acetic Acid, Glacial	70	C	C	G	G	X	C	X	E	X	E	G	E
Acetic Aldehyde	70	I	I	I	I	I	I	I	I	I	I	I	G
Acetic Anhydride	70	G	C	G	G	G	E	X	E	X	E	G	E
Acetic Anhydride, 50 %	70	I	I	I	I	I	I	I	I	I	I	I	E
Acetone	70	C	C	E	E	C	G	X	E	X	E	G	E
Acetone Cyanohydrin	70	G	X	G	G	X	X	X	E	X	E	E	E
Acetonitrile	70	G	E	G	G	E	G	C	I	I	E	E	E
Acetophenone	70	C	X	E	E	X	X	X	G	X	E	G	G
Acetyl Acetone	70	I	I	I	I	I	I	X	E	X	E	E	E
Acetyl Chloride	100	X	X	C	C	X	X	X	G	C	E	C	X
Acetylene	70	G	G	E	E	G	G	E	E	E	E	E	E
Acetylene Dichloride	100	X	X	X	X	X	X	X	E	E	E	X	G
Acid Crude Tar	70	I	I	I	I	I	I	I	I	I	I	I	E
Acrolein (Inhibited)	70	I	I	I	I	I	I	I	I	I	I	E	I
Acrylic Acid	70	I	I	I	I	I	I	I	I	I	I	I	G
Acrylonitrile	100	X	X	I	X	X	C	X	G	E	E	G	G
Adipic Acid	70	E	E	G	E	G	I	E	I	I	I	I	I
Aero Safe 2300	70	I	I	I	I	I	I	I	I	I	I	E	I
Aeroshell 7A,17 Grease	70	I	I	I	I	I	I	I	I	I	I	X	I
Aeroshell 1A, 1AC,4	70	I	I	I	I	I	I	I	I	I	I	E	I

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Agricultural Spray	70	X	X	C	G	C	C	C	E	G	E	G	E
Air 180 F	70	X	E	E	E	E	E	E	X	E	E	E	E
Air 200 F	70	X	C	E	E	G	C	G	X	E	E	E	E
Air, Ambeint	70	E	E	E	E	E	E	E	E	E	E	E	E
Aircraft Hyd Oil AA	70	X	X	X	X	G	X	G	G	G	E	E	G
Alkazene (dibromoethyl-benzene)	70	X	X	X	X	X	X	X	I	G	I	X	I
Alkylaryl Sulfonates	70	I	I	I	I	I	I	I	I	I	I	E	I
Allyl Alcohol	70	E	E	E	E	E	E	E	E	G	E	I	E
Allyl Bromide	70	X	X	X	I	X	X	X	G	G	E	I	E
Allyl Chloride	70	X	X	I	X	X	X	X	E	G	E	E	E
Alum	150	E	E	I	E	E	E	E	E	E	E	I	E
Aluminum Acetate	100	X	E	I	E	E	E	E	E	X	E	E	E
Aluminum Bromide	70	E	E	E	E	E	E	E	I	E	E	E	I
Aluminum Chloride	150	E	E	I	E	E	E	E	E	E	E	E	E
Aluminum Fluoride	70	F	E	E	E	E	E	E	E	E	E	E	E
Aluminum Hydroxide	70	E	G	E	E	E	G	G	E	C	E	E	I
Aluminum Nitrate	70	E	E	E	E	E	E	E	E	G	E	E	E
Aluminum Phosphate	70	E	E	E	E	E	E	E	E	E	E	I	E
Aluminum Salts	70	I	I	I	I	I	I	I	I	I	I	E	E
Aluminum Sulfate	70	E	E	E	E	E	E	E	E	E	E	E	E
Alums (ammonium or potassium)	70	I	I	I	I	I	I	I	I	I	I	E	I
Amines (mixed)	70	I	I	I	I	I	I	I	I	I	E	C	I
Amino Ethanol	70	I	I	I	I	I	I	I	I	I	I	I	E
Aminoethylethanoamine	70	I	I	I	I	I	I	I	I	I	I	I	E
Ammonia (aqueous)	70	X	X	X	X	X	X	X	I	I	I	E	E
Ammonia Cupric Sulfate	150	X	E	I	E	E	E	E	E	E	E	E	E
Ammonia Gas (cold)	70	E	E	E	E	E	E	E	E	X	E	I	E
Ammonia Gas (hot)	70	X	X	G	G	G	G	X	E	X	E	I	E
Ammonia Liquor	70	I	I	I	I	I	I	I	I	I	I	I	E
Ammonia Vapor	70	I	I	I	I	I	I	I	I	I	I	I	E
Ammonia Water	70	G	G	E	E	G	G	G	E	G	E	E	E
Ammonium Acetate	70	E	I	G	E	G	G	C	I	X	E	E	I
Ammonium Bicarbonate	70	E	E	E	E	E	E	E	I	E	E	I	I
Ammonium Bisulfate (50%)	70	I	I	I	I	I	I	I	I	I	I	E	I
Ammonium Carbonate	70	E	E	E	G	G	I	X	E	E	E	E	E

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Ammonium Chloride	150	E	E	I	E	E	E	E	E	E	E	E	E
Ammonium Dichromate	70	E	I	I	I	E	I	I	I	I	E	I	I
Ammonium Hydroxide	150	E	X	I	X	E	G	X	E	X	E	E	E
Ammonium Metaphosphate	70	I	I	I	I	I	I	I	I	I	E	E	E
Ammonium Nitrate	150	G	X	I	E	G	E	E	E	I	E	E	E
Ammonium Nitrite	70	C	C	E	E	E	E	C	E	I	E	E	E
Ammonium Persulfate	70	E	X	G	G	G	E	X	E	I	E	G	E
Ammonium Phosphate	150	E	X	I	E	E	E	E	E	E	E	E	E
Ammonium Sulfate	70	E	G	E	E	E	E	X	E	E	E	E	E
Ammonium Sulfate	150	E	E	I	E	E	E	X	E	E	E	E	E
Ammonium Sulfide	70	E	C	E	E	E	E	E	E	C	E	E	E
Ammonium Sulfite	150	E	X	I	E	X	E	E	E	E	E	E	E
Ammonium Thiocyanate	70	E	X	E	E	X	E	E	E	E	E	E	E
Ammonium Thiosulfate	70	E	E	E	E	E	E	E	E	E	E	E	I
Amyl Acetate	70	X	X	G	G	X	X	X	E	X	E	E	E
Amyl Acid Phosphate	70	X	I	X	I	X	I	I	I	I	E	I	I
Amyl Alcohol	70	G	G	E	E	E	E	G	E	E	E	E	E
Amyl Amine	70	X	X	C	X	X	X	X	E	X	E	I	E
Amyl Borate	70	X	X	X	X	E	E	G	I	E	E	E	I
Amyl Bromide	70	X	X	X	X	X	X	X	I	E	E	I	I
Amyl Chloride	70	X	X	X	X	X	X	X	E	G	E	E	E
Amyl Chloronaphthalene	70	X	X	X	X	X	X	X	I	E	E	E	I
Amyl Ether	70	X	X	X	X	X	X	E	I	I	E	I	I
Amyl Iodide	70	X	X	X	X	X	X	X	I	I	E	I	I
Amyl Naphthalene	70	X	X	X	X	X	X	X	G	E	E	E	I
Amyl Oleate	100	X	X	X	X	X	X	C	I	I	E	I	E
Amyl Phenol	100	X	X	X	X	X	X	X	E	E	E	G	E
Amyl Phthalate	100	X	X	I	X	X	X	X	E	X	E	I	E
Amylene	70	X	X	X	X	X	X	C	I	E	E	I	I
Anethole	100	X	X	X	X	X	X	X	X	C	E	X	X
Anhydrous Ammonia	Use hose only approved for NH3 Anhydrous Ammonia												
Aniline	70	G	G	E	E	X	X	X	E	G	E	G	E
Aniline Dyes	70	G	G	G	E	G	G	C	E	G	E	E	E
Aniline Hydro-Chloride	70	E	X	E	E	X	X	E	I	E	E	E	I
Aniline Oil	70	G	G	E	E	X	X	X	E	G	E	G	E

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Animal Fats	70	X	X	G	E	G	G	E	E	E	E	E	E
Animal Gelatin	100	X	X	X	X	G	E	E	E	E	E	E	E
Animal Grease	100	X	X	X	X	G	E	E	E	E	E	G	E
Animal Oils	100	X	X	X	X	G	E	E	E	E	E	G	E
Ansul Ether	70	X	X	C	C	X	X	C	E	X	I	I	E
Antifreeze (glycol base)	70	E	E	E	E	E	E	E	E	E	E	E	E
Anitimony Chloride	70	I	I	I	I	I	I	I	I	I	E	E	I
Antimony Chloride ( 50%)	70	I	I	I	I	I	I	I	I	I	E	I	E
Antimony Salts	70	I	I	I	I	I	I	I	I	I	E	E	I
Antimony Trichloride	70	I	I	E	E	I	I	G	E	E	E	I	E
Aqua Ammonia	70	X	X	I	I	I	I	I	I	I	E	I	E
Aqua Regia (	70	X	X	X	C	X	C	X	C	C	E	C	C
Arco ATF Dexron	70	I	I	I	I	I	I	I	I	I	I	E	I
Arco C2, 1000	70	I	I	I	I	I	I	I	I	I	I	E	I
Aroclor 1248	70	X	X	C	C	X	C	C	I	E	I	I	I
Aroclor 1254	70	X	X	X	C	X	X	X	I	E	I	I	I
Aroclor 1260	70	E	E	E	E	E	E	E	I	E	I	I	I
Aroclor, Monsanto	70	I	I	I	I	I	I	I	I	I	I	I	I
Aromatic Hydrocarbons	100	X	X	X	X	X	X	X	E	E	E	X	E
Aromatic Spirits	100	X	X	X	X	X	X	X	E	E	E	X	E
Aromatic Tar	100	X	X	X	X	X	X	X	E	E	E	I	E
Arquads	70	E	E	I	E	E	E	E	E	E	E	E	E
Arsenic Acid	100	G	E	I	E	E	E	E	E	X	E	E	E
Arsenic Salts	70	I	I	I	I	I	I	I	I	I	I	X	I
Arsenic Trichloride	100	X	X	X	X	X	X	X	X	X	X	I	I
Askarel	70	X	X	X	X	X	X	G	G	E	I	G	I
Asphalt	70	X	X	X	X	G	C	G	X	E	E	G	X
Asphalt ( 180 F & above )	180	Use only Host Asphalt Hose											
ASTM Fuel A	70	X	X	X	X	E	E	E	E	E	E	E	G
ASTM Fuel B	70	X	X	X	X	C	X	G	E	E	E	G	G
ASTM Fuel C	70	X	X	X	X	X	X	G	E	E	E	G	E
ASTM Oil No. 1	100	X	X	X	X	E	G	E	E	E	E	E	E
ASTM Oil No. 2	100	X	X	X	X	G	C	E	E	E	E	E	E
ASTM Oil No. 3	100	X	X	X	X	G	C	E	E	E	E	E	E
ATF Special Auto Trans. Fluid	70	I	I	I	I	I	I	I	I	I	E	E	I

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Automatic Brake Fluid	70	I	I	I	I	I	I	I	I	I	E	I	I
Baking Soda (Sodium Bicarb)	70	E	E	E	E	E	E	E	E	E	E	I	E
Baltic Types	70	I	I	I	I	I	I	I	I	I	I	E	I
Banana Oil (Amyl-Acetate)	70	X	X	G	G	X	X	X	E	X	E	I	E
Banvel Ag Spray	70	I	I	I	I	I	I	I	I	I	E	E	I
Bardol B	70	X	X	X	X	X	X	X	I	E	E	E	I
Barium Carbonate	150	E	I	I	E	E	E	E	E	E	E	E	E
Barium Chloride	150	E	E	I	E	E	E	E	E	E	E	E	E
Barium Hydroxide	150	C	C	I	E	E	E	C	E	E	E	E	E
Barium Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Barium Sulfate	150	G	E	I	E	E	G	E	E	E	E	E	E
Barium Sulfate Aqueous sol hot	70	I	I	I	I	I	I	I	I	I	E	E	I
Barium Sulfide	70	E	G	E	E	E	E	E	E	E	E	E	E
Basic Copper Arsenate	70	E	E	I	I	E	E	E	E	E	E	E	E
Beer	70	E	E	E	E	E	E	E	E	E	E	E	E
Beet Sugar Liquors	70	E	E	E	E	E	E	E	E	E	E	E	E
Bellows 80-20 Hyd. Oil	70	I	I	I	I	I	I	I	I	I	E	E	I
Belt Oil	70	I	I	I	I	I	I	I	I	I	E	I	E
Benzal Chloride	70	I	I	I	I	I	I	I	I	I	E	I	E
Benzaldehyde	70	X	X	E	E	X	C	X	E	X	E	E	E
Benzene (Benzol)	100	X	X	X	X	X	X	X	E	E	E	I	G
Benzene Solvent (Ligroin)	100	X	X	X	X	X	X	E	E	E	E	I	E
Benzene Sulfonic Acid	70	X	X	X	C	G	E	X	E	E	I	E	E
Benzine ( Petroleum Ether)	70	X	X	X	X	G	X	E	E	E	E	G	E
Benzoic Acid	70	C	C	G	G	C	G	C	E	E	E	E	E
Benzoic Aldehyde	100	X	X	X	C	X	X	X	E	X	E	I	E
Benzol (Benzene)	70	X	X	X	X	X	X	X	E	G	E	I	I
Benzotetrachloride	100	X	X	X	X	X	X	X	X	X	E	X	X
Benzoyl Chloride	70	X	X	X	X	X	X	X	G	G	E	E	G
Benzyl Acetate	100	X	X	I	X	X	X	X	X	X	E	C	E
Benzyl Alcohol	70	C	C	E	E	G	G	X	E	E	E	E	E
Benzyl Benzoate	70	I	X	E	E	X	X	X	I	E	E	E	I
Benzyl Chloride	70	X	X	X	X	X	X	X	E	E	E	E	E
Benzphenone	70	I	I	I	I	I	I	I	I	I	I	E	I
Bezene	70	X	X	X	X	X	X	X	E	G	E	G	X

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Bichromate of Soda	150	I	I	I	I	I	I	I	I	I	E	E	E
Biphenyl	70	X	X	X	X	X	X	X	I	E	E	I	I
Bismuth Carbonate	70	I	I	I	I	I	I	I	I	I	E	E	E
Bitumastic	70	I	I	I	I	I	I	I	I	I	E	I	I
Black Sulfate Liquor	70	E	E	E	E	E	E	E	E	E	E	E	E
Blast Furnace Gas	70	C	C	C	C	G	G	C	E	E	E	E	E
Bleach	100	X	X	X	E	X	X	X	X	X	E	C	X
Bleach Solutions	70	X	X	X	E	X	X	X	X	X	E	C	X
Blue Vitriol (Copper Sulfate)	70	E	E	E	E	E	E	E	E	E	E	I	E
Borax (Sodium Teraborate)	70	E	E	E	E	E	E	E	E	E	E	E	E
Bordeau Mixture	70	E	E	E	E	E	E	E	E	E	E	E	E
Boric Acid	70	E	E	E	E	E	E	E	E	E	E	E	E
Boric Copper Sulfate	70	I	I	I	I	I	I	I	I	I	E	G	I
Brake Fluid-Petroleum base	70	I	I	I	I	I	I	I	I	I	E	E	I
Brake Fluid - Synthetic base	70	I	I	I	I	I	I	I	I	I	E	E	I
Brine	70	E	E	E	E	E	E	E	E	E	E	E	E
Brine (Sodium Chloride Solution)	70	E	E	E	E	E	E	E	E	E	E	E	E
Bromine	100	X	X	X	X	X	X	X	X	B	E	I	X
Bromine Trifluoride	70	X	X	X	X	X	X	X	X	X	X	I	X
Bromine Water	70	X	X	C	C	C	G	X	I	E	E	I	I
Bromine-Anhydrous	70	X	X	X	X	X	X	X	X	E	E	I	X
Bromobenzene	70	X	X	X	X	X	X	X	G	E	E	I	X
Bromochloromethane	70	X	X	G	C	X	X	X	C	G	E	I	G
Bromotoluene	70	I	I	I	I	I	I	I	I	I	I	I	X
Bunker C	100	X	X	X	X	C	X	X	X	E	E	G	E
Bunker Oil	100	X	X	I	X	C	X	E	E	E	E	G	E
Butadiene	70	X	X	C	C	C	G	C	E	G	E	E	E
Butane		Use only hose approved for Butane service											
Butane (Liquid)		Use only hose approved for Butane service											
Butanol (Butyl Alcohol)	100	X	X	I	E	E	E	G	E	C	E	E	E
Butter	100	X	X	X	X	G	G	E	E	X	E	X	E
Butter Oil (Use FDA Hose)	100	I	I	I	I	I	I	E	E	I	E	I	E
Butyric Acid	70	I	I	I	I	I	I	I	I	I	E	I	I
Butyl Acetoacetate	70	I	I	I	I	I	I	I	I	I	E	I	E
Butyl Aceryl Ricinoleate	70	X	X	E	E	C	C	C	I	E	E	I	I

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Butyl Acrylate	100	X	X	X	X	X	X	X	G	X	E	I	G
Butyl Alcohol	100	X	X	I	E	E	E	G	E	C	E	E	E
Butly Alcohol Secondary	70	I	I	I	I	I	I	I	I	I	E	I	E
Butyl Aldehyde	70	X	X	G	G	G	C	X	E	X	E	I	E
Butyl Amine	70	X	X	C	C	X	X	C	E	X	E	E	E
Butyl Benzene	100	X	X	X	X	X	X	X	E	E	E	C	E
Butyl Benzoate	70	X	C	E	E	X	X	X	I	E	E	I	I
Butyl Benzyl Phthalate	100	X	X	I	X	X	X	X	E	X	E	I	E
Butyl Bromide	100	X	X	X	X	X	X	X	G	G	E	G	G
Butyl Butyrate	100	X	X	X	X	X	X	X	G	X	E	I	G
Butyl Carbitol	70	X	X	E	E	G	E	C	E	E	E	E	E
Butyl Cellosolve	70	X	X	E	E	C	G	C	E	X	E	I	E
Butyl Ether	70	X	X	G	C	C	C	C	E	X	E	E	E
Butyl Ethyl Acetaldehyde	100	X	X	X	X	X	X	X	E	X	E	G	E
Butyl Ethyl Ether	100	X	X	X	X	X	X	X	E	I	E	E	E
Butyl Formate	70	X	X	I	I	X	X	X	I	I	E	I	I
Butyl Iodide	70	X	X	I	I	X	I	X	I	I	E	I	I
Butyl Mercaptan (Tertiary)	70	I	I	I	I	I	I	I	I	I	E	E	I
Butyl Oleate	70	X	X	G	G	X	X	X	I	E	I	I	I
Butyl Phthalate	70	X	X	E	I	I	X	X	E	C	E	I	E
Butyl Stearate	70	X	X	C	C	X	X	G	E	E	E	E	E
Butyl -Acetate	70	X	X	G	G	X	C	X	E	X	E	G	E
Butylene	70	X	X	X	X	C	C	G	I	E	E	I	I
Butyraldehyde	70	X	X	G	G	C	X	X	E	X	E	G	E
Butyric Acid	70	E	X	E	E	C	C	X	E	G	E	I	E
Butyronitrile	70	X	X	E	E	X	I	X	I	I	E	I	I
Cadmium Acetate	70	I	I	I	I	I	I	I	I	I	E	I	E
Cadmium Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Cake Alum (Aluminum Sulfate)	70	E	E	E	E	E	E	E	E	E	E	E	E
Calcine Liquor	70	I	I	I	I	I	I	I	I	I	E	E	I
Calcium Acetate	100	X	X	I	E	I	E	X	E	X	E	E	E
Calcium Aluminate	70	I	I	I	I	I	I	I	I	I	E	I	E
Calcium Arsenate	70	I	I	I	I	I	I	I	I	I	I	G	I
Calcium Bichromate	150	X	X	I	X	X	X	X	X	X	E	X	X
Calcium Bisulfate	150	E	I	I	E	E	E	E	E	E	E	E	E



# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Calcium Bisulfide	150	I	I	I	E	I	I	E	I	E	E	E	E
Calcium Bisulfite	70	X	X	I	X	E	E	E	E	E	E	E	E
Calcium Carbonate	150	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Chlorate	70	I	I	I	I	I	I	I	I	I	E	E	I
Calcium Chloride	150	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Hydroxide	100	E	E	I	E	E	C	C	E	X	E	E	E
Calcium Hypochlorate	100	X	X	I	X	X	I	X	X	X	E	E	G
Calcium Hypochlorite	70	C	X	E	E	X	E	C	E	E	E	E	G
Calcium Nitrate	150	E	I	I	E	I	E	G	E	E	E	I	E
Calcium Nitrite	150	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Salt	70	I	I	I	I	I	I	I	I	I	E	I	E
Calcium Silicate	150	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Sulfate	150	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Sulfhydrate	100	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Sulfide	150	E	I	I	E	I	E	E	E	E	E	E	E
Calcium Sulfite	150	E	I	I	E	I	E	E	E	E	E	E	E
Caliche Liquors	70	I	I	I	I	I	I	I	I	I	E	E	E
Cane Sugar Liquors	70	E	E	E	E	E	E	E	E	E	E	E	E
Caprylic Acid	100	X	X	X	X	X	X	X	E	I	E	E	E
Carbamate	70	X	X	G	G	G	G	C	I	E	E	E	I
Carbitol	100	X	I	I	E	I	E	X	E	E	E	E	E
Carbitol Acetate	100	X	X	X	X	X	X	X	E	I	E	E	E
Carbolic Acid (Phenol)	100	X	I	I	X	I	I	I	I	I	E	C	E
Carbolic Acid	70	X	I	E	X	I	E	I	I	I	E	C	E
Carbon Bisulfide	70	X	X	X	X	X	X	G	I	E	E	I	I
Carbon Dioxide	100	E	I	I	E	I	E	E	E	E	E	E	E
Carbon Dioxide (Wet)	70	I	I	I	I	I	I	I	I	I	E	E	I
Carbon Disulfide	70	X	X	X	X	X	X	X	X	E	E	X	X
Carbon Monoxide	70	E	E	E	E	E	E	E	E	E	E	E	E
Carbon Terrachloride	100	X	X	X	X	X	X	X	E	E	E	C	G
Carbon Terrafluoride	70	I	I	E	E	I	I	I	I	I	E	I	I
Carbonic Acid	100	E	I	I	E	I	E	E	E	E	E	E	E
Caro Syrup	100	I	I	I	I	I	I	I	E	I	E	I	E
Casein	70	I	I	I	I	I	I	I	I	I	E	E	I
Casing Head Gasoline	70	I	I	I	I	I	I	I	I	I	E	I	G

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Castor Oil	100	X	I	I	E	I	E	E	E	E	E	E	E
Caustic	70	I	I	I	I	I	I	I	I	I	E	I	E
Caustic Potash	70	G	G	E	E	G	E	G	E	G	E	E	E
Caustic Soda	150	E	I	I	E	I	C	C	E	X	E	E	E
Caustic Soda (20%)	70	I	I	I	I	I	I	I	I	I	E	G	E
Ceilugard , 200	70	I	I	I	I	I	I	I	I	I	E	E	I
Ceilulube,1000,220AST220,A60	70	I	I	I	I	I	I	I	I	I	E	E	I
Cellosize	100	X	X	I	X	X	X	X	E	I	E	E	E
Cellosolve	100	X	I	I	I	I	X	X	E	I	E	E	E
Cellosolve Acetate	100	X	I	I	I	I	X	X	E	I	E	E	E
Cellosolve, Butyl (under 100 F)	70	I	I	I	I	I	I	I	I	I	E	G	E
Cellulube	70	X	X	E	E	X	X	X	E	E	E	E	E
China Wood Oil (Tung Oil)	70	X	X	C	C	E	G	E	E	E	E	E	E
Chlordane	70	I	I	I	I	I	I	I	I	I	I	E	E
Chlorinated Solvents	100	X	X	X	X	X	X	X	E	E	E	I	G
Chlorine (Dry)	70	No hose recommended											
Chlorine (Wet)	70	X	X	X	X	X	X	X	C	C	E	X	X
Chlorine 3% solution	70	X	X	X	I	X	X	X	X	E	E	I	E
Chlorine Dioxide	70	X	X	C	C	X	G	X	I	E	I	I	I
Chlorine Saturated Solution	70	X	X	X	I	X	G	C	I	E	E	I	I
Chlorine Trifluoride	70	X	X	X	X	X	X	X	I	X	X	X	I
Chlorine Water	70	I	I	I	I	I	I	I	I	I	E	E	I
Chloroacetic Acid	70	X	X	C	C	X	G	X	E	X	E	E	E
Chloroacetone	70	X	X	G	E	C	C	X	E	X	E	I	E
Chloroacetonitrile	70	C	I	C	I	C	I	C	I	I	I	I	I
Chlorobenzene	70	X	X	X	X	X	X	X	E	E	E	G	G
Chlorobenzol	100	X	X	X	X	X	X	X	X	E	E	C	E
Chlorobromomethane	70	X	X	E	E	X	X	X	E	E	E	G	E
Chlorobutadiene	70	X	X	X	X	X	X	X	I	E	I	I	I
Chlorobutane	100	X	X	X	X	X	X	X	I	E	E	I	X
Chlorododecane	70	X	X	X	X	X	X	X	I	E	I	I	I
Chloroethyl Benzene	70	X	X	X	X	X	X	X	G	G	E	I	G
Chloroform (Trichloromethane)	70	X	X	X	X	X	X	X	G	E	E	G	G
Chloronaphthalene	70	X	X	X	X	X	X	X	I	E	E	I	I
Chloropentane	100	X	X	X	X	X	X	X	X	E	E	I	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Chlorophenol	100	X	X	X	X	X	X	X	X	E	E	C	E
Chloropropane	100	X	I	X	X	X	X	X	X	X	E	I	E
Chlorosulfonic Acid	100	X	X	X	X	X	X	X	X	X	E	I	X
Chlorothene	70	X	X	X	X	X	X	X	E	E	E	I	E
Chlorotoluene	70	X	X	X	X	X	X	X	E	E	E	X	E
Chlorox (Sodium Hypochlorite)	70	X	X	G	G	G	E	G	E	E	E	G	E
Chocolate Syrup	100	I	I	I	E	E	I	E	E	I	E	G	E
Chrome Alum	70	I	I	I	I	I	I	I	I	I	E	E	E
Chrome Plating Solutions	70	X	X	G	G	X	X	X	I	E	E	I	I
Chromic Acid	70	X	X	C	C	X	E	X	E	E	E	E	E
Chromic Acid (100%)	70	X	X	X	X	X	X	X	X	X	E	X	E
Chromic Acid (25%)	100	X	X	X	X	X	X	X	X	I	E	C	E
Chromic Acid (50%)	70	I	I	I	I	I	I	I	I	I	E	X	E
Chromium Salts	70	I	I	I	I	I	I	I	I	I	E	G	I
Cider	100	I	I	I	E	E	I	E	I	I	E	I	E
Citgo FR Fluids	70	I	I	I	I	I	I	I	I	I	E	E	E
Citric Acid	70	E	G	E	E	E	E	G	E	E	E	E	E
Citrous Oils	70	X	X	F	G	X	X	C	I	I	E	I	E
Coal Gas	70	I	I	I	I	I	I	I	I	I	E	E	I
Coal Oil	70	I	I	I	I	I	I	I	I	I	E	I	E
Coal Tar (Creosote)	70	X	X	X	X	G	C	E	G	E	E	X	G
Coal Tar (Naptha)	70	I	I	I	I	I	I	I	E	E	E	C	E
Cobalt Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Cocoa Butter	100	I	I	I	I	I	I	I	E	I	E	E	E
Coconut Oils	70	X	X	C	C	G	C	E	E	E	E	I	E
Cod Liver Oil	70	X	X	E	E	G	G	E	E	E	E	E	E
Coke Oven Gas	70	X	X	X	X	X	G	X	E	E	E	E	E
Cologne Spirits (Ethyl Alcohol)	70	E	E	E	E	E	E	E	E	E	E	I	E
Copper Acetate	70	E	X	E	E	E	G	E	I	X	E	I	I
Copper Arsenate (Cupric Arsenate)	70	I	I	I	I	I	I	I	I	I	E	E	E
Copper Chloride	100	X	I	I	E	I	E	E	E	E	E	E	E
Copper Cyanide	70	E	E	E	E	G	G	E	E	E	E	E	E
Copper Hydrate	100	X	E	I	I	I	I	C	E	X	E	E	E
Copper Hydroxide	100	X	X	I	I	I	C	C	E	X	E	E	E
Copper Nitrate	100	X	I	I	E	I	E	E	E	E	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Copper Nitrate ( Cupric Nitrate)	70	I	I	I	I	I	I	I	I	I	E	I	I
Copper Nitrite	100	X	I	I	E	I	E	E	E	E	E	E	E
Copper Sulfate	70	E	E	E	E	E	E	E	E	E	E	E	E
Copper Sulfide	100	X	I	I	E	I	E	E	E	E	E	E	E
Com Oil	70	X	X	I	C	C	G	E	E	E	E	E	E
Com Syrup	100	I	I	I	I	I	I	G	E	I	E	E	E
Cottonseed Oil	70	X	X	I	G	G	G	E	E	E	E	E	E
Creosote	100	X	X	X	X	X	X	F	G	E	E	G	E
Cresols	100	X	X	X	X	C	C	C	E	E	E	G	E
Cresylic Acid	70	X	X	X	X	X	C	C	E	E	E	I	E
Crotonaldehyde	70	I	I	I	I	I	I	I	I	I	E	I	E
Crude Oil	70	X	X	X	X	X	X	E	E	E	E	C	E
Crude Petroleum Oil	70	X	X	X	X	X	X	E	E	E	E	C	E
Crude Wax	70	X	X	X	X	X	X	E	E	E	E	C	E
Cryolite	70	I	I	I	I	I	I	I	I	I	I	G	I
Cumene	100	X	X	X	X	X	X	X	E	E	E	G	E
Cupric Carbonate	100	X	X	X	E	I	E	E	E	E	E	E	E
Cupric Chloride	70	G	E	E	E	G	E	E	E	E	E	I	E
Cupric Hydroxide	70	C	G	E	I	I	G	G	E	C	E	I	E
Cupric Nitrate	100	X	I	I	E	I	E	E	E	E	E	E	E
Cupric Nitrite	100	X	I	I	E	I	E	E	E	E	E	E	E
Cupric Sulfate	100	X	I	I	E	E	E	E	E	E	E	I	E
Cutting Fluid (Oil)	70	X	X	X	X	G	G	E	E	E	E	G	E
Cutting Oil, Sulfur Base	70	I	I	I	I	I	I	C	I	I	E	I	E
Cutting Oil, Water Soluble	70	I	I	I	I	I	I	E	I	I	E	X	E
Cyclohexane	70	X	X	X	X	G	X	E	E	E	E	E	E
Cyclohexanol	70	C	X	X	C	E	G	C	E	E	E	G	E
Cyclohexanone	70	X	X	C	C	X	X	X	E	X	E	E	E
Cyclopentane	100	X	X	X	X	I	C	C	E	E	E	C	E
Cyclopentanol	100	X	X	X	X	X	X	C	E	I	E	E	E
Cyclopentanone	70	X	X	X	X	X	X	X	E	X	E	C	E
Dasco FR150,FR200,FR200BFR310	70	I	I	I	I	I	I	I	I	I	E	E	E
Dasco FRD200,DC510,DC550,DC560	70	I	I	I	I	I	I	I	I	I	E	E	E
DDT in Kerosene	70	X	X	X	X	C	X	E	E	E	E	I	E
Decalin (Decahydronaphthalene)	70	X	X	X	X	X	X	X	E	E	E	E	G

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Decane	100	X	X	X	X	X	X	X	X	E	E	X	X
Decanol	100	X	I	X	E	I	E	E	E	X	E	E	E
Dectol R & O Oils	70	I	I	I	I	I	I	I	I	I	E	I	I
Decyl Alcohol	100	X	X	X	X	X	X	C	E	E	E	E	E
Decyl Aldehyde	100	X	X	X	X	X	X	X	E	X	E	C	E
Decyl Butyl Phthalate	100	X	X	X	X	X	X	X	E	X	E	C	E
Denatured Alcohol	70	E	E	E	E	E	E	E	E	G	E	E	E
Detergent Solutions	70	E	E	E	E	E	E	E	I	E	E	E	E
Developing Fluids	70	E	E	E	E	E	E	E	I	E	E	E	E
Dexron	70	I	I	I	I	I	I	I	I	I	I	X	I
Dextrin	70	I	I	I	I	I	I	I	I	I	E	E	E
Diacetone	70	C	C	E	E	G	G	X	E	X	E	E	E
Diacetone Alcohol	70	C	C	E	E	G	G	X	E	X	E	E	E
Diamonium Phosphate	70	I	I	I	I	I	I	I	I	I	I	E	I
Diamyl Phenol	100	X	X	X	X	X	X	X	E	X	E	I	E
Diamylamine	100	X	X	E	X	X	X	X	E	I	E	C	E
Diamylene	100	X	X	X	X	X	X	X	E	E	E	C	E
Diazinon, Dilute	70	I	I	I	I	I	I	I	I	I	E	X	G
Dibenzyl Sebecate	70	X	X	G	G	X	X	X	I	G	E	I	I
Dibenzylether	70	X	X	G	G	X	X	X	E	X	E	E	E
Dibromobenzene	100	X	X	X	X	X	X	X	E	E	E	I	G
Dibromoethylbenzene	70	X	X	X	X	X	X	X	I	G	I	I	I
Dibutyl Acetate	70	I	I	I	I	X	I	I	E	I	E	I	E
Dibutyl Amine	100	X	X	X	X	X	X	X	I	X	E	I	E
Dibutyl Ether	100	X	X	C	X	X	X	X	E	C	E	E	E
Dibutyl Phthalate	100	X	X	E	X	X	X	X	E	X	E	E	E
Dibutyl Sebacate	70	X	X	G	G	X	X	X	E	G	E	E	E
Dicalcium Phosphate	100	E	I	I	E	I	E	E	E	E	E	E	E
Dichloroacetic Acid	100	X	X	X	X	X	X	X	E	X	E	I	E
Dichlorobutane	100	X	X	X	X	X	X	X	E	E	E	I	E
Dichloro-Difluoro Methane	70	G	G	G	G	E	E	E	I	G	I	I	I
Dichloroethane	70	X	X	C	I	X	X	X	E	E	E	I	E
Dichloroethyl Ether	100	X	X	X	X	X	X	X	E	X	E	C	E
Dichloroethylene	100	X	X	X	X	X	X	X	X	X	E	X	X
Dichloro-Fluoro Methane	70	X	X	X	X	X	X	X	E	X	I	I	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Dichlorohexane	100	X	X	X	X	X	X	X	E	E	E	E	E
Dichloro-Isopropyl Ether	70	X	X	X	C	X	X	X	I	C	I	I	I
Dichloromethane	70	X	X	X	X	X	X	X	G	G	E	I	E
Dichloropentane	100	X	X	X	X	X	X	X	E	E	E	C	E
Dichloropropane	100	X	X	X	X	X	X	X	E	E	E	I	E
Dicyclohexylamine	70	X	X	X	X	X	X	C	G	X	E	I	G
Diesel Oil	70	X	X	X	X	G	G	E	E	E	E	I	E
Diethanolamine	70	G	G	E	I	I	C	G	E	E	E	E	E
Diethyl Benzene	70	X	X	X	X	X	X	X	E	E	E	I	G
Diethyl Carbinol	70	E	I	E	I	I	I	E	E	C	E	E	E
Diethyl Carbonate	70	X	X	X	X	X	X	X	E	E	E	I	E
Diethyl Ether	70	X	X	C	X	C	C	X	E	X	E	G	E
Diethyl Ketone	70	X	X	G	G	X	X	X	E	X	E	I	E
Diethyl Oxalate	70	C	C	C	X	X	X	X	E	I	I	I	E
Diethyl Phthalate	70	X	X	E	I	I	X	X	E	C	E	E	E
Diethyl Sebcate	70	X	X	E	G	X	G	C	E	G	E	E	E
Diethyl Sulfate	100	X	X	X	X	X	X	X	E	X	E	E	E
Diethyl Triamine	100	X	I	E	I	I	X	C	E	I	E	E	E
Diethylamine	70	E	E	E	E	E	C	G	E	X	E	I	E
Diethylamine	100	I	I	E	I	I	I	X	E	I	E	I	E
Diethylbenzene	70	I	I	I	I	I	I	I	I	I	E	E	I
Diethylene Glycol	70	E	E	E	E	E	E	E	E	E	E	E	E
Diethylene Triamine	70	I	I	I	I	I	I	I	I	I	E	I	E
Dihydroxyethyl Amine	70	I	I	I	I	I	I	I	I	I	E	I	E
Dihydroxyethyl Ether	100	E	I	E	E	I	E	E	E	E	E	E	E
Diisobutyl Ketone	70	X	X	G	G	X	X	X	E	X	E	E	E
Diisobutylene	70	X	X	X	X	X	X	G	E	E	E	E	E
Diisooctyl Adipate	70	I	I	I	I	I	I	I	I	I	E	I	E
Diisocyanate	100	X	X	X	X	X	X	X	E	X	E	C	E
Diisodecyl Adipate	100	X	X	E	I	X	X	X	E	I	E	I	E
Diisodecyl Phthalate	100	X	X	E	X	X	X	X	E	I	E	I	E
Diisopropanyl Amine	100	X	X	E	X	X	X	X	E	I	E	C	E
Diisopropyl Amine	100	X	X	E	X	X	X	C	E	I	E	C	E
Diisopropyl Benzene	70	X	X	X	X	X	X	X	I	E	I	I	I
Diisopropyl Ether	70	X	X	X	X	X	X	G	E	I	E	I	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Diisopropyl Ketone	70	X	X	E	E	X	X	X	E	X	E	E	E
Diisopropylidene Acetone	70	X	X	G	C	X	X	X	I	X	I	I	I
Dilauryl Ether	70	X	X	X	X	X	X	X	E	X	G	C	E
Dimehtylsulfate	70	X	X	X	X	X	X	X	E	I	C	C	E
Dimethylamine	70	G	G	E	I	I	X	G	E	I	E	I	E
Dimethyl Aniline	70	X	X	C	G	X	X	X	E	X	E	E	I
Dimethyl Benzene	100	X	X	X	X	X	X	X	E	E	E	C	E
Dimethyl Ether	70	X	X	C	X	C	G	E	E	E	I	E	I
Dimethyl Formamide	70	X	X	C	G	X	X	G	G	X	E	G	G
Dimethyl Phthalate	70	X	X	E	E	X	X	X	E	E	E	E	E
Dimethyl Sulfide	No hose recommended for this chemical												
Dimethylaniline	70	I	I	I	I	I	I	I	I	I	E	I	E
Dimethylketone	100	X	X	X	X	X	X	X	E	X	E	E	E
Dimethyl Phenol	100	X	X	X	X	X	X	X	E	E	E	E	E
Dinitrobenzene	100	X	X	X	X	X	X	X	E	E	E	C	E
Dinitrotoluene	70	X	X	X	X	X	X	X	I	X	I	I	I
Diethyl Adipate	70	X	X	E	G	X	X	X	E	C	E	I	E
Diethyl Phthalate	70	X	X	E	G	X	X	X	E	C	E	E	E
Diethyl Sebacate	70	X	X	E	G	X	X	X	E	G	E	E	E
Diocyl Amine	100	X	X	X	X	X	X	X	E	C	E	C	E
Dioxane (Diethylene Ether)	100	X	X	E	X	X	X	X	E	X	E	E	E
Dioxocane	70	X	X	C	G	X	X	X	E	X	E	I	E
Dioxolane	100	X	X	X	X	X	X	X	E	I	E	C	E
Dipentene	70	X	X	X	X	X	X	G	E	E	E	E	E
Diphenyl (Phenylbenzene)	70	X	X	X	X	X	X	X	I	E	E	I	I
Diphenyl Oxides	70	X	X	X	X	X	X	X	I	E	E	I	I
Diphenyl Phthalate	100	X	X	E	X	X	X	X	E	X	E	E	E
Dipropyl Ketone	100	X	X	X	X	X	X	X	E	X	E	E	E
Dipropylamine	100	X	X	E	X	X	X	X	E	C	E	E	E
Dipropylene Glycol	100	E	I	E	E	I	E	E	E	E	E	E	E
Dirco Oils	70	I	I	I	I	I	I	I	I	I	E	E	E
Disodium Phosphate	70	E	E	E	I	I	E	E	E	I	E	I	E
Divinyl Benzene	70	X	X	X	I	I	X	X	E	E	E	I	E
Dodecyl Benzene	100	X	X	X	X	X	X	X	E	I	E	C	E
Dodecyl Toluene	100	X	X	X	X	X	X	X	E	E	E	C	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Dow-Pet	100	X	X	X	X	X	X	X	E	E	E	C	E
Dowtherm A	100	X	X	X	X	X	C	X	E	E	E	E	E
Dowtherm E	100	X	X	X	X	X	C	X	E	E	E	E	E
Dowtherm Oil	70	X	X	X	X	X	X	X	E	E	E	I	E
Dowtherm SR-1	100	X	X	X	X	X	X	E	E	E	E	E	E
DP 47,200Flow-Dowi	70	I	I	I	I	I	I	I	I	I	E	E	I
Dry Cleaning Fluid	70	X	X	X	X	X	X	C	I	E	I	I	I
Duro FR-HD	70	I	I	I	I	I	I	I	I	I	E	E	I
Duro Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Enamels	70	X	X	X	X	X	X	E	E	E	E	C	E
Energol HL-68	70	I	I	I	I	I	I	I	I	I	E	E	E
Energol H LPC-68	70	I	I	I	I	I	I	I	I	I	E	E	E
EP Hydraulic Oils-Chevron	70	I	I	I	I	I	I	I	I	I	E	E	E
Epichlorohydrin	70	X	X	E	E	X	X	X	E	X	I	G	I
Epsom Salt (Magnesium Sulfate)	70	E	E	E	E	E	E	E	E	E	E	E	E
Essential Oils	70	I	I	I	I	I	I	I	I	I	E	E	E
Ethane	70	X	X	X	X	E	E	E	I	E	I	I	I
Ethanol (Ethyl Alcohol)	100	E	E	E	E	E	E	E	E	E	E	E	E
Ethanol Amine	100	X	X	E	X	X	X	X	E	X	E	C	E
Ethers	70	X	X	X	X	X	X	X	E	X	E	E	E
Ethyl Acetate	70	X	X	X	G	G	X	X	E	X	E	E	E
Ethyl Acetoacetate	100	X	X	E	X	X	X	X	E	X	E	E	E
Ethyl Acrylate	70	X	X	E	E	X	X	X	E	X	E	G	E
Ethyl Alcohol	70	E	E	E	E	E	E	E	E	E	E	E	E
Ethyl Aldehyde	No hose recommended												
Ethyl Amine	70	C	C	E	E	X	C	X	E	X	E	G	E
Ethyl Benzene	70	X	X	X	X	X	X	X	E	E	E	G	E
Ethyl Benzoate	70	G	G	E	E	X	X	X	G	E	E	I	I
Ethyl Bromide	70	C	I	C	C	X	X	X	G	E	I	G	I
Ethyl Butanol	100	E	I	E	E	I	I	E	E	C	E	E	E
Ethyl Butyl Acetate	100	X	X	X	X	X	X	X	E	I	E	C	E
Ethyl Butyl Alcohol	100	E	I	E	E	I	E	E	E	C	E	E	E
Ethyl Butyl Amine	100	X	X	E	I	I	I	I	I	I	E	I	E
Ethyl Butyraldehyde	100	X	X	X	X	X	X	X	E	I	E	C	E
Ethyl Butyrate	70	X	X	X	X	X	X	X	E	I	E	E	E



# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Ethyl Caprylate	70	X	X	X	X	X	I	G	I	I	I	I	I
Ethyl Cellosolve	70	X	X	G	C	X	C	X	E	X	E	I	E
Ethyl Cellulose	70	G	G	G	G	G	E	G	E	X	E	E	I
Ethyl Chlorocarbonate	70	X	X	X	G	X	X	X	I	E	I	I	I
Ethyl Chloroformate	70	X	X	X	G	X	X	X	I	X	I	I	I
Ethyl Dichloride	100	X	X	X	X	X	X	X	X	X	E	C	C
Ethyl Ether	70	X	X	C	X	X	X	C	E	X	E	G	E
Ethyl Fomate	70	X	X	G	G	G	G	X	E	E	E	I	E
Ethyl Hexanol	70	E	E	E	E	G	G	G	E	G	E	I	E
Ethyl Hexoic Acid	100	X	X	X	X	X	X	X	E	X	E	E	E
Ethyl Hexyl Acetate	100	X	X	X	X	X	X	X	E	I	E	C	E
Ethyl Hexyl Alcohol	100	E	I	E	E	I	E	E	E	C	E	E	E
Ethyl Iodide	70	X	X	C	C	X	X	X	E	E	I	I	G
Ethyl Isobutyl Ether	70	X	X	C	X	X	C	X	E	I	E	I	E
Ethyl Isobutyrate	70	X	X	X	X	X	I	X	I	I	C	I	I
Ethyl Mercaptan	70	X	X	X	C	C	G	X	I	G	E	E	I
Ethyl Methyl Ketone	100	X	X	X	X	X	X	X	E	I	E	E	E
Ethyl Oxalate	70	E	E	E	E	X	X	X	E	E	E	E	E
Ethyl Pentachloro-Benzene	70	X	X	X	X	X	X	X	X	E	E	E	I
Ethyl Phthalate	100	X	X	X	X	X	X	X	E	X	E	I	E
Ethyl Propionate	70	X	X	X	X	X	I	X	I	I	I	I	I
Ethyl Propyl Ether	70	X	X	C	X	X	C	X	E	I	E	I	E
Ethyl Propyl Ketone	100	X	X	X	X	X	X	X	E	X	E	E	E
Ethyl Silicate	70	G	G	E	E	E	G	E	E	E	E	E	E
Ethyl Sulfate	100	X	X	X	X	X	X	X	E	X	E	E	E
Ethylchloride	70	C	C	E	G	C	C	E	G	E	E	E	G
Ethylene	70	C	C	G	G	C	I	E	I	E	I	I	I
Ethylene Bromide	70	X	X	G	G	X	X	X	G	G	E	I	G
Ethylene Chloride	70	X	X	G	G	X	X	X	G	G	E	G	G
Ethylene Chloride	70	X	I	C	X	X	I	X	I	I	C	I	I
Ethylene Chlorohydrin	70	C	G	E	E	G	G	X	E	E	E	E	E
Ethylene Dibromide	70	X	X	X	X	X	X	X	X	X	E	C	X
Ethylene Dichloride	70	X	X	C	C	X	X	X	G	E	E	I	G
Ethylene Glycol	70	E	E	E	E	E	E	E	E	E	E	E	E
Ethylene Oxide	70	X	X	C	C	X	X	X	I	X	C	I	I

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Ethylene Trichloride	70	X	X	C	C	X	X	X	E	E	E	I	G
Ethlenediamine	70	E	E	E	E	E	C	E	E	X	E	E	E
Ex-Tri	100	X	X	X	X	X	X	X	E	E	E	C	E
Fatty Acids	70	X	X	X	X	X	X	X	E	E	E	G	E
Feran	70	I	I	I	I	I	I	I	I	I	E	I	E
Ferric Bromide	150	E	I	E	E	I	E	E	E	E	E	E	E
Ferric Chloride	150	E	I	E	E	I	E	E	E	E	E	E	E
Ferric Nitrate	70	E	E	E	E	E	E	E	E	E	E	E	E
Ferric Sulfate	150	E	E	E	E	E	E	E	E	E	E	E	E
Ferrous Acetate	100	X	X	E	E	X	E	X	E	X	E	E	E
Ferrous Chloride	150	E	I	E	E	I	E	E	E	C	E	E	E
Ferrous Hdroxide	100	E	I	E	I	I	I	I	E	X	E	E	E
Ferrous Sulfate	70	E	E	E	E	E	E	E	E	E	E	E	E
Fertilizer (liquid manure)	100	I	I	I	E	I	E	I	E	I	E	E	E
Fire Resistant-Hydral	70	I	I	I	I	I	I	I	I	I	E	E	E
Firtec 290, MF	70	I	I	I	I	I	I	I	I	I	E	E	I
Fish Oil	70	X	X	X	X	X	X	E	E	E	I	I	E
Fixing Solution (Photo)	70	I	I	I	I	I	I	I	I	I	E	E	I
Fluid (Texaco)	70	I	I	I	I	I	I	I	I	I	E	E	I
Fluoboric Acid	70	E	G	E	E	G	E	E	E	X	E	E	E
Fluorinated Cyclic Ethers	70	X	X	E	E	I	I	I	I	E	I	I	I
Fluorine	70	X	X	X	X	C	C	C	X	G	X	E	X
Fluorobenzene	70	X	X	X	X	X	X	X	E	E	E	I	G
Fluorocarbon Oils	70	X	X	E	E	G	I	I	I	I	I	I	G
Fluorolube	70	C	C	E	E	G	E	E	I	G	I	I	I
Fluorosilicic Acid	70	E	G	E	E	E	E	E	E	E	E	E	I
Fomaldehyde	70	G	G	E	E	G	E	C	E	G	E	G	E
Fomaldehyde 40%	100	C	I	E	E	I	E	E	E	C	E	E	E
Formalin	100	C	I	E	E	I	E	E	E	E	E	E	E
Formamide	70	E	E	E	E	E	I	E	E	X	E	I	E
Formic Acid	70	G	E	E	E	E	E	G	E	C	E	E	E
FR Fluid D	70	I	I	I	I	I	I	I	I	I	E	E	I
FR Hydraulic Fluid	70	I	I	I	I	I	I	I	I	I	E	E	I
Freon 11	70	X	X	X	X	X	E	G	I	E	I	I	I
Freon 12	70	G	G	G	G	E	E	E	I	G	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Freon 13	70	E	E	E	E	E	E	E	I	E	I	I	I
Freon 13B1	70	E	E	E	E	E	E	E	I	E	I	I	I
Freon 21	70	X	X	X	X	X	X	X	E	X	E	I	E
Freon 22	70	C	G	E	E	E	E	X	I	X	E	I	E
Freon 31	70	G	G	E	E	E	G	X	I	X	I	I	I
Freon 32	70	E	E	E	E	E	E	E	I	X	I	I	I
Freon 112	70	X	C	X	X	C	E	E	I	E	I	I	I
Freon 113	70	X	G	X	C	E	E	E	I	G	I	I	I
Freon 114	70	E	E	E	E	E	E	E	I	G	I	I	I
Freon 114B2	70	X	C	X	X	C	E	G	I	G	I	I	I
Freon 115	70	E	E	E	E	E	E	E	I	G	I	I	I
Freon 142B	70	G	G	E	G	E	E	E	I	X	I	I	I
Freon 152A	70	E	E	E	E	E	C	E	I	X	I	I	I
Freon 218	70	E	E	E	E	E	E	E	I	E	I	I	I
Freon C316	70	E	E	E	E	E	E	E	I	I	I	I	I
Freon C318	70	E	E	E	E	E	E	E	I	G	I	I	I
Freon 502	70	E	E	E	E	E	I	G	I	G	I	I	I
Freon BF	70	X	X	X	X	C	G	G	I	E	I	I	I
Freon MF	70	X	X	X	X	C	G	E	I	G	I	I	I
Freon TA	70	C	C	G	G	G	E	E	I	C	I	I	I
Freon TC	70	X	C	G	G	E	E	E	I	E	I	I	I
Freon TF	70	X	C	X	X	E	E	E	I	G	I	I	I
Freon TMC	70	X	X	C	C	C	G	G	I	E	I	I	I
Freon T-P35	70	E	E	E	E	E	E	E	I	E	I	I	I
Freon T-WD602	70	X	C	E	G	G	G	G	I	E	I	I	I
Fruit Juice	70	C	I	I	I	E	E	I	I	I	E	I	E
Fuel A (ASTM)	70	X	X	X	X	G	E	E	E	E	E	C	E
Fuel B (ASTM)	70	X	X	X	X	E	C	E	E	E	E	C	G
Fuel Oils	70	X	X	X	X	G	G	E	E	E	E	E	E
Fumeric Acid	70	G	C	C	G	G	G	E	I	E	E	E	I
Furan (Furfuran)	70	X	X	X	C	X	X	X	I	I	E	E	I
Furfural (Ant Oil)	70	X	X	E	E	C	G	X	E	X	E	E	E
Fusel Oil	70	I	I	I	I	I	I	I	I	I	E	E	I
Fyr Guard, 150,200	70	I	I	I	I	I	I	I	I	I	E	E	I
Fyraquel (Cellulube)	70	X	X	E	E	X	X	X	E	E	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Gallic Acid	70	E	C	E	E	G	E	C	E	E	E	E	E
Gas, Natural	100	E	I	I	I	I	I	I	C	C	E	C	E
Gasohol	70	X	X	X	X	X	X	C	E	E	E	X	E
Gasoline	70	X	X	X	X	C	C	E	E	E	E	E	G
Gasoline (standard)	70	X	X	X	X	X	X	E	I	E	E	G	G
Gasoline (Unleaded up to 50%aromatic)	70	X	X	X	X	X	X	E	I	E	E	G	G
Gerlatin	70	E	E	E	E	E	E	E	E	E	E	E	E
Glacial Acetic Acid	100	X	X	X	X	X	X	X	E	X	E	E	E
Glauber's Salt (aq)	70	E	X	E	E	E	X	X	I	E	E	E	E
Gluconic Acetic Acid	100	X	X	X	X	X	X	X	E	I	E	E	E
Glucose	70	E	E	E	E	E	E	E	E	E	E	E	E
Glue	70	G	G	G	G	E	E	E	E	E	E	E	E
Glycerin (Glycerol)	70	E	E	E	E	E	E	E	E	E	E	E	E
Glycerol	70	E	E	E	E	E	E	E	E	E	E	E	E
Glycols	70	E	E	E	E	E	E	E	E	E	E	E	E
Grain Alcohol (Ethyl Alcohol)	70	E	E	E	E	E	E	E	E	E	E	I	E
Grease	70	X	X	X	X	G	C	E	G	E	E	E	E
Grease, Silicon Base	70	I	I	I	I	E	E	E	E	E	E	E	E
Green Sulfate Liquor	70	E	E	E	E	E	E	E	E	E	E	E	E
Green Vitriol (Ferrous Sulfate)	70	E	E	E	E	E	E	E	E	E	E	I	E
Gulf FR Fluid G-200	70	I	I	I	I	I	I	I	I	I	E	E	I
Gulf FR Fluid P37,P40,P43,P47	70	I	I	I	I	I	I	I	I	I	I	G	I
Halowas Oil	70	X	X	X	X	X	X	X	E	E	E	X	E
Heptanal	70	X	X	C	I	I	X	X	E	X	E	I	E
Heptane	70	X	X	X	X	E	G	E	E	E	E	G	E
Hexaline Glycol	70	I	I	I	I	I	I	I	I	I	E	I	E
Hexane	70	X	X	X	X	E	G	E	E	E	E	E	G
Hexanol (Hexyl Alcohol)	100	E	E	E	G	E	E	E	E	E	E	E	E
Hexene	70	X	X	X	X	G	C	G	E	E	E	X	E
Hexyl Alcohol	70	E	E	E	G	E	E	E	E	E	E	E	E
Hexyl Methyl Ketone	100	X	X	X	X	X	X	X	E	X	E	E	E
Hi-Tri	100	X	X	X	X	X	X	X	E	E	E	C	E
H-I solution	70	X	X	X	X	X	X	X	I	I	I	I	E
Houghto-Safe 1055,1110,1115,1120,113	70	I	I	I	I	I	I	I	I	I	E	E	E
Houghto-Safe,271416,520,&620,625,640	70	I	I	I	I	I	I	I	I	I	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Houghto-Safe (5046)	70	I	I	I	I	I	I	I	I	I	E	E	E
Hy-Chock Oil	70	I	I	I	I	I	I	I	I	I	E	E	E
Hydrofluoric Acid	70	I	I	I	I	I	I	I	I	I	E	I	E
Hydrafluid 760 (Texaco & Houghton)	70	I	I	I	I	I	I	I	I	I	E	E	I
Hydrafluid , AZR & O, ABAAC	70	I	I	I	I	I	I	I	I	I	E	E	I
Hydrasol A	70	I	I	I	I	I	I	I	I	I	E	E	I
Hydraulic Fluid (Phosphate Ester Base)	70	I	I	I	I	I	I	I	I	I	E	E	I
Hydraulic Fluid (Water Glycol Base)	70	I	I	I	I	I	I	I	I	I	E	E	I
Hydraulic Fluid HF-18, HF-20	70	I	I	I	I	I	I	I	I	I	E	E	I
Hydraulic Fluid HF-31	70	I	I	I	I	I	I	I	I	I	E	E	E
Hydraulic Oil (Petroleum Base)	70	X	X	X	X	I	G	E	E	E	E	E	E
Hydrazine	70	G	E	E	E	I	G	G	I	X	E	E	E
Hydrochloric Acid - 15%	70	E	X	G	C	X	E	X	E	I	E	G	E
Hydrochloric Acid - 10%	125	X	X	X	E	X	X	X	E	I	E	E	E
Hydrochloric Acid - 25%	70	E	G	E	E	I	E	C	E	E	E	I	E
Hydrochloric Acid -37% (cold)	70	E	I	E	G	I	E	X	E	I	E	E	E
Hydrobromic Acid (37%)	150	E	I	E	E	I	E	X	E	I	E	E	G
Hydrocyanic Acid	70	G	G	E	E	I	E	G	I	E	E	E	E
Hydrocyanic Acid -20%	70	I	I	I	I	I	I	I	I	I	E	E	E
Hydrocyanic Acid -98%	70	I	I	I	I	I	I	I	I	I	E	E	E
Hydrofluoric Acid	70	X	X	X	X	X	X	X	E	X	E	E	E
Hydrofluoric Acid	125	X	X	X	X	X	X	X	X	X	E	X	X
Hydrofluoric Acid - 10%	100	X	X	X	X	X	X	X	I	I	E	I	C
Hydrofluoric Acid - 50%	70	G	X	G	G	G	E	X	E	E	E	E	E
Hydrofluoric Acid -75%	70	X	X	C	C	X	E	X	E	E	E	E	E
Hydrofluoric Acid-Anhydrous	70	X	X	X	X	X	E	X	I	X	E	I	I
Hydrofluosilicic Acid (Fluosilicic Acid)	150	E	I	E	E	I	E	E	I	I	E	E	C
Hydrofluosilicic Acid (Fluosilicic Acid)	70	I	I	I	I	I	I	I	I	I	E	I	E
Hydrogen Chloride	70	I	I	I	I	I	I	I	I	I	E	E	E
Hydrogen Dioxide over 10%	70	I	I	I	I	I	I	I	I	I	I	I	G
Hydrogen Fluoride	70	I	I	I	I	I	I	I	I	I	I	G	I
Hydrogen Gas	70	X	X	E	X	E	E	E	E	E	E	E	E
Hydrogen Peroxide (Conc.)	70	X	X	C	G	X	E	X	E	E	E	I	G
Hydrogen Peroxide - 3%	70	E	E	E	E	E	E	E	E	E	E	I	E
Hydrogen Peroxide -10%	70	I	I	I	I	I	I	I	I	I	E	G	G

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Hydrogen Peroxide - 30%	70	C	C	C	E	C	E	C	E	E	E	G	G
Hydrogen Peroxide - 50%	100	X	X	X	X	X	X	X	X	X	E	X	X
Hydrogen Peroxide - 70%	70	X	X	X	X	X	X	X	X	X	E	X	X
Hydrogen Peroxide - 90%	70	X	X	X	X	X	X	X	X	X	E	X	X
Hydrogen Sulfide (Wet)	70	X	X	X	X	X	X	X	E	X	E	I	E
Hydrogen Sulfide (Wet)	100	X	X	X	X	X	X	X	E	X	E	I	E
Hydrolube ( Water Glycol)	70	I	I	I	I	I	I	I	I	I	I	I	I
Hydrolubic Oil (Houghton)	70	I	I	I	I	I	I	I	I	I	E	E	E
Hydroquinone	70	G	X	C	G	X	C	X	I	G	E	E	I
Hypo (Sodium Thiosulfate)	70	E	E	E	E	E	E	E	E	E	E	I	E
Hypochlorous Acid	70	E	X	E	E	X	X	X	I	E	E	E	I
I-Chloro-I-Nitroethane	70	X	X	X	X	X	X	X	I	X	E	I	I
Industron 53	70	I	I	I	I	I	I	I	I	I	E	E	E
Ink (printer's)	70	I	I	I	I	I	I	I	I	I	E	E	E
Ink Oil	70	I	I	I	I	I	I	I	I	I	E	G	E
Insulating Oil (Transformer)	70	I	I	I	I	I	I	I	I	I	E	E	E
Iodine	70	X	X	C	G	C	E	G	E	G	E	E	E
Iodine Pentafluoride	70	X	X	X	X	X	X	X	I	X	C	I	I
Iodine, in Alcohol	70	I	I	I	I	I	I	I	I	I	E	E	E
Iodoform (Triiodomethane)	70	X	X	X	C	X	C	X	I	I	C	I	I
Iris Fluid 902	70	I	I	I	I	I	I	I	I	I	E	E	E
Iris Fluid 905	70	I	I	I	I	I	I	I	I	I	E	E	E
Iron Acetate	100	X	X	E	X	X	X	X	E	X	E	E	E
Iron Hydroxide	100	X	X	X	X	X	X	X	E	X	E	E	E
Iron Salts	150	E	I	E	E	I	E	E	E	E	E	E	E
Iron Sulfate	150	E	I	E	E	I	E	E	E	E	E	E	E
Iron Sulfite	70	I	I	I	I	I	I	I	I	I	E	I	E
Isoamyl Acetate	100	X	X	X	X	X	X	X	E	X	E	C	E
Isoamyl Alcohol	70	E	E	E	E	E	E	C	I	E	E	I	E
Isoamyl Bromide	100	X	X	X	X	X	X	X	C	I	E	I	C
Isoamyl Butyrate	100	X	X	X	X	X	X	X	I	I	E	C	G
Isoamyl Chloride	100	I	I	I	I	I	I	I	I	I	E	I	G
Isoamyl Ether	100	I	I	I	I	I	I	I	E	I	E	I	E
Isoamyl Phthalate	70	X	X	X	X	X	X	X	E	I	E	I	E
Isobutane		No hose recommended											

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Isobutanol	100	E	I	E	E	I	E	E	E	C	E	E	E
Isobutyl Acetate	70	X	X	E	X	X	X	X	E	X	E	I	E
Isobutyl Alcohol	70	E	G	E	E	E	E	C	E	E	E	E	E
Isobutyl Ether	100	X	X	X	X	X	X	X	X	I	E	I	E
Isobutylene	100	X	X	X	X	X	X	X	E	E	E	C	E
Isobutyric Acid	70	E	I	E	E	G	I	X	I	I	I	I	I
Isocyanate Toluene Diisocyanate	70	I	I	I	I	I	I	I	I	I	E	E	E
Isododecane	70	X	X	X	X	E	E	E	I	E	E	I	I
Isooctane	70	X	X	X	X	E	E	E	E	E	E	G	G
Isocoytl Thioglycolate	70	I	I	I	I	I	I	I	I	I	E	E	E
Isopentane	70	X	X	X	I	I	X	E	E	E	E	I	G
Isophorone	70	X	X	G	C	X	X	X	I	X	I	I	G
Isopropanol (Isopropyl Alcohol)	70	E	G	E	E	E	E	G	E	E	E	E	E
Isopropanol Amine	70	I	I	I	I	I	I	I	I	I	E	I	E
Isopropyl Acetate	70	X	X	G	G	X	X	X	E	X	E	E	E
Isopropyl Alcohol	70	E	G	E	E	E	E	G	E	E	E	E	E
Isppropyl Benzene	70	X	X	X	X	X	X	X	E	E	E	I	E
Isopropyl Chloride	70	X	X	X	X	X	X	X	G	E	E	I	G
Ispropyl Ether	70	X	X	X	X	C	C	G	E	X	E	E	E
Ispropyl Toluene	100	X	X	X	X	X	X	X	E	E	E	G	E
Jet Fuel JP-3	70	X	X	X	X	G	C	E	E	E	E	E	E
Jet Fuel JP-4	70	X	X	X	X	G	C	E	E	E	E	E	E
Jet Fuel JP-5	70	X	X	X	X	G	C	E	E	E	E	E	E
Jet Fuel JP-6	70	I	I	I	I	I	I	I	I	I	E	E	I
Jet Fuel JP-X	70	I	I	I	I	I	I	I	I	I	E	E	I
JMLO	70	I	I	I	I	I	I	I	I	I	E	I	X
Kerosene	70	X	X	X	X	G	C	E	E	E	E	E	E
Ketchup	100	X	X	X	E	X	X	E	E	I	E	E	E
Ketone	70	X	X	X	X	X	X	X	E	E	E	G	E
Ketones	70	X	X	X	X	X	X	X	E	X	E	E	E
Laquer Solvents	70	X	X	X	X	X	X	X	E	X	E	E	E
Laquers	70	X	X	X	X	X	X	X	E	X	E	E	E
Lactic Acid (cold)	70	E	E	E	E	E	E	C	E	E	E	E	E
Lactic Acid (hot)	70	X	X	X	X	X	C	X	I	E	I	I	I
Lactol (Aliphatic Naphtha)	70	X	I	X	I	E	E	E	E	E	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Lard	70	X	X	G	E	G	G	E	E	E	E	E	E
Lard Oil	70	X	X	X	X	G	X	E	E	E	E	E	E
Lasso Ag Spray	70	I	I	I	I	I	I	I	I	I	E	E	E
Latex	70	I	I	I	I	I	I	I	I	I	I	G	I
Lauryl Alcohol	70	E	E	E	E	E	E	E	E	G	E	E	E
Lavender Oil	70	X	X	X	X	X	X	G	G	E	E	I	G
Lead Acetate	70	E	C	E	E	E	C	G	E	X	E	E	E
Lead Arsenate	70	I	I	I	I	I	I	I	I	I	E	E	E
Lead Chloride	70	G	I	I	I	G	E	I	I	I	I	I	I
Lead Nitrate	70	E	E	E	E	E	E	E	E	I	E	E	E
Lead Salt	70	I	I	I	I	I	I	I	I	I	I	I	E
Lead Sulfamate	70	E	E	E	E	E	E	G	E	E	E	E	E
Lead Sulfate	150	E	I	E	E	I	E	E	E	E	E	E	E
Lead Tetraethyl	100	I	I	I	I	I	I	I	I	I	E	I	I
Lead Tetraethyl	70	I	I	I	I	I	I	I	I	I	E	X	I
Lecithin	70	I	I	I	I	I	I	I	I	I	E	E	I
Ligroin (Petroleum Ether)	70	X	X	X	X	G	X	E	E	E	E	G	E
Lime (Calcium Oxide)	70	E	E	E	E	E	E	E	E	I	E	E	E
Lime Bleach	70	E	E	E	E	E	E	I	I	E	E	E	I
Lime Sulfur	70	X	X	E	E	E	E	X	E	E	E	E	E
Lindane	70	I	I	I	I	I	I	I	I	I	E	E	E
Linoleic Acid	70	X	X	X	X	X	X	G	I	G	E	E	E
Linseed Oil	70	X	X	E	E	E	G	E	E	E	E	E	E
Liquefied Petroleum Gas(LPG)	70	X	X	X	X	G	C	E	E	E	E	I	X
Liquid Soap	70	E	E	E	E	E	E	E	E	E	E	E	E
Lithium Hydroxide	70	I	I	I	I	I	I	I	I	I	I	I	E
Lithium Salts	70	I	I	I	I	I	I	I	I	I	I	I	E
Lubricating Oils (diester under 130F)	70	I	I	I	I	I	I	I	I	I	E	E	I
Lubricating Oils (under 120F)	70	I	I	I	I	I	I	I	I	I	E	E	I
Lubricating Oils (Petroleum Base)	70	X	X	X	X	G	C	E	E	E	E	X	E
Lunar Caustic (silver Nitrate)	70	E	E	E	E	E	E	E	E	E	E	I	E
Lye (Potassium or Sodium Hydroxide)	70	G	G	E	E	G	E	G	E	G	E	I	E
Machine Oil	70	I	I	I	I	I	I	I	I	I	I	E	I
Magnesium Acetate	100	X	X	E	C	X	X	X	E	X	G	E	E
Magnesium Carbonate	70	E	E	E	E	E	E	E	E	E	E	E	E



# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Magnesium Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Magnesium Hydroxide	70	G	G	E	E	E	E	G	E	E	E	E	E
Magnesium Nitrate	70	E	I	E	E	E	E	E	E	I	E	E	E
Magnesium Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Magnesium Sulfate	150	E	E	E	E	E	E	E	E	E	E	E	E
Maleic Acid	70	C	C	C	G	E	X	X	G	E	E	E	E
Maleic Anhydride	70	C	C	E	E	C	X	X	I	X	I	I	I
Malic Acid	70	C	C	E	E	C	E	E	I	E	E	I	E
Malonyl Nitrile	70	E	I	E	E	E	I	E	I	I	I	I	I
Malthion Ag Spray	70	X	X	X	X	X	X	X	E	I	E	E	E
Malthion Ag Spray (Dilute)	70	X	X	X	X	X	X	X	E	E	E	G	E
Manganese Salts	70	I	I	I	I	I	I	I	I	I	E	E	E
Manganese Sulfate	150	E	I	E	E	I	E	E	E	E	E	E	E
Manganese Sulfide	150	E	I	E	E	I	E	E	E	E	E	E	E
Mangesium Hydrate	70	I	I	I	I	I	I	I	I	I	E	I	E
Mangesium Hydroxide	70	I	I	I	I	I	I	I	I	I	E	I	E
Mapp Gas	70	I	I	I	I	I	I	I	I	I	E	E	E
Maxmul (Penzoil Hydraulic Fluid)	70	I	I	I	I	I	I	I	I	I	I	I	I
Mayonnaise	70	I	I	I	I	E	I	E	E	I	E	I	E
Menthanol	70	I	I	I	I	I	I	I	I	I	E	I	E
Mercurous Nitrate	70	E	E	E	E	E	E	E	E	I	E	E	E
Mercury	70	E	E	E	E	E	E	E	E	E	E	E	E
Mercury Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Mercury Cyanide	70	E	E	E	E	G	E	E	E	I	E	E	E
Mercury Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Mercury Vapor	70	I	I	I	I	I	I	I	I	I	E	E	I
Mesityl Oxide	70	X	X	G	G	X	X	X	E	X	E	E	E
Metallic Soaps	70	I	I	I	I	I	I	I	I	I	I	I	I
Methallyl Alcohol	100	E	E	E	E	E	E	E	E	C	E	C	E
Methallyl Chloride	70	I	I	I	I	I	I	I	I	I	E	I	E
Methane	70	C	C	X	X	G	G	E	G	G	E	E	G
Methanol (Fomaldehyde)	70	G	G	E	E	G	E	C	E	G	E	E	E
Methanol (Methyl Alcohol)	70	E	E	E	E	E	E	E	E	G	E	E	E
Methoxychlor (Insecticide)	70	I	I	I	I	I	I	I	I	I	E	E	I
Methyacrylic Acid	70	X	X	X	X	X	G	G	E	G	E	I	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Methyl Acetate	100	X	X	E	E	G	X	X	E	X	E	G	E
Methyl Acetate	100	X	X	X	X	X	X	X	E	X	E	E	E
Methyl Acetone		No Hose recommended											
Methyl Alcohol	100	E	I	E	E	I	E	E	E	X	E	E	E
Methyl Amine	70	E	E	E	E	E	I	G	I	I	I	G	I
Methyl Amine - 60%	70	I	I	I	I	I	I	I	I	I	E	E	E
Methyl Amine - 99%	70	I	I	I	I	I	I	I	I	I	E	E	E
Methyl Amyl Alcohol	100	E	E	E	E	E	E	E	E	C	E	I	E
Methyl Amyl Carbinol	100	E	X	E	E	X	E	E	E	X	E	E	E
Methyl Amyl Ketone	100	X	X	X	X	X	X	X	E	X	E	C	E
Methyl Aniline	70	E	E	E	E	X	I	X	I	I	E	I	I
Methyl Benzene	100	E	I	E	X	I	E	E	E	C	E	E	E
Methyl Bromide	70	X	X	G	G	X	X	G	I	E	E	E	I
Methyl Butanol	100	E	I	E	E	I	E	E	E	C	E	E	E
Methyl Butanone	100	X	X	X	X	X	X	X	E	X	E	C	E
Methyl Buty Ketone (MBK)	70	X	X	E	E	X	X	X	E	X	E	E	E
Methyl Butyrate	70	X	X	X	X	X	I	X	I	I	I	I	I
Methyl Carbitol	100	X	X	X	X	I	X	X	E	X	E	E	E
Methyl Cellosolve	70	X	X	E	E	C	G	C	E	X	E	E	E
Methyl Chloride	70	X	X	C	C	X	X	X	E	E	E	G	E
Methyl Cyclohexane	100	X	X	X	X	X	X	X	E	C	E	I	E
Methyl Cyclopentane	70	X	X	X	X	X	X	X	I	G	E	I	I
Methyl Ether	70	X	X	C	X	C	G	E	E	C	E	I	E
Methyl Ethyl Ketone (MEK)	70	X	X	G	E	C	X	X	E	X	E	G	E
Methyl Formate	70	X	X	E	E	E	C	X	E	I	E	E	E
Methyl Hexanol	100	C	I	E	E	I	E	E	E	E	E	E	E
Methyl Hexyl Ketone	100	X	X	X	X	X	X	X	E	X	E	C	E
Methyl Iodide	70	E	I	E	E	X	I	X	I	I	I	I	I
Methyl Isobutyl Carbinol	70	E	E	E	E	E	E	E	E	E	E	I	E
Methyl Isobutyl Ketone (MIBK)	70	X	X	G	G	X	X	X	E	X	E	G	E
Methyl Isopropyl Ketone	70	X	X	G	G	X	X	X	E	X	E	G	E
Methyl Methacrylate	70	X	X	X	C	X	E	X	E	X	E	G	E
Methyl Normal Amyl Ketone	100	X	X	X	X	X	X	X	E	X	E	C	E
Methyl Oleate	70	X	X	E	E	X	X	X	E	E	E	I	E
Methyl Salicylate	70	C	C	C	G	X	X	X	I	I	E	E	I

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Methylacrylate	70	X	X	E	E	E	X	X	I	X	I	G	I
Methylacrylic Acid	70	X	X	E	E	E	X	X	I	X	I	I	I
Methylallyl Acetate	100	X	X	X	X	X	X	X	E	X	E	E	E
Methylallyl Chloride	100	X	X	X	X	X	X	X	E	X	E	I	E
Methylamyl Acetate	70	X	X	C	X	X	G	X	E	X	E	I	E
Methylene Bromide	100	X	X	X	X	X	X	X	C	C	E	E	G
Methylene Chloride	No hose recommended												
Methylene Dichloride	70	X	I	I	I	I	I	I	I	I	I	I	I
Milk	70	G	G	E	E	E	E	I	E	E	E	E	E
Mineral Oil	70	X	X	X	X	G	G	E	E	E	E	E	E
Mineral Spirits ( Naphata)	70	X	X	X	X	G	G	E	E	E	E	E	E
Mobil Therm 603	70	I	I	I	I	I	I	I	I	I	E	E	I
Mobilmer S122	70	I	I	I	I	I	I	I	I	I	E	E	I
Molasses	100	E	E	E	E	E	E	E	E	E	E	E	E
Monobromobenzene	100	X	X	X	X	X	X	X	C	E	E	C	G
Monochloroacetic Acid	100	X	X	X	X	X	X	X	E	I	E	E	E
Monochlorobenzene	70	X	X	X	X	X	X	X	G	E	E	G	G
Monoethanolamine	70	E	E	E	E	X	X	C	E	X	E	G	E
Monoethyl Amine	100	I	I	E	I	I	I	I	E	I	E	C	E
Monoisopropanol Amine	100	X	X	X	X	X	X	X	E	I	E	C	E
Monomethyl Aniline	70	X	X	C	G	X	X	X	X	G	E	I	X
Monomethylether	70	X	X	C	X	C	G	E	E	C	E	I	E
Monovinyl Acetylene	70	E	E	E	E	E	E	E	I	E	I	I	I
Motor Oil	70	X	X	X	X	G	G	E	E	E	E	C	E
Motor Oils	135	X	X	X	X	X	X	E	E	E	E	G	E
Mould Oil	70	X	X	X	X	X	X	E	E	E	E	G	E
Muriatic Acid	125	E	I	X	X	X	X	X	E	I	E	E	E
Muriatic Acid (Hydrochloric Acid)	70	E	G	E	G	C	E	X	E	E	E	G	E
Muriatic Gas (Dichlorodiethyl sulfide)	70	E	G	E	E	E	E	I	I	I	E	E	I
Naphthalene	70	X	X	X	X	X	X	X	E	E	E	I	E
Naphthalenic Acid	70	X	X	X	X	X	X	E	E	E	E	I	E
Naphthenic Acid	70	X	X	X	X	X	X	E	E	E	E	I	E
Naptha, Petroleum	70	X	X	X	X	G	G	E	E	E	E	E	E
Natural Gas(85% Methane)	70	G	G	X	X	E	E	E	E	E	E	I	E
Neatsfoot Oil	70	X	X	E	X	X	E	E	I	E	I	I	I

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Neohexane	100	X	X	X	X	X	X	E	E	E	E	C	E
Neutral Oil	100	X	X	X	X	X	X	X	E	X	E	C	E
Neu-Tri	100	X	X	X	X	X	X	X	E	E	E	C	E
Neville Acid	70	X	X	E	E	X	X	X	I	E	I	I	I
n-Hexaldehyde	70	X	X	E	E	E	C	X	E	X	E	E	E
Nickel Acetate	70	E	X	E	E	E	X	E	E	X	E	E	E
Nickel Chloride	150	E	I	E	E	I	E	E	E	E	E	E	E
Nickel Nitrate	150	E	I	E	E	I	E	E	E	E	E	E	E
Nickel Plating Solution	70	I	I	I	I	I	I	I	I	I	I	E	E
Nickel Salts	70	I	I	I	I	I	I	I	I	I	I	E	E
Nickel Sulfate	150	E	I	E	E	I	E	E	E	E	E	E	E
Nicotine Sulfate	70	I	I	I	I	I	I	I	I	I	I	I	E
Niter (Potassium Nitrate)	70	E	E	E	E	E	E	E	E	E	E	I	E
Niter Cake (Sodium Bisulfate)	70	E	E	E	E	E	E	E	E	E	E	E	E
Nitrana 2	70	I	I	I	I	I	I	I	I	I	I	I	E
Nitrana 3	70	I	I	I	I	I	I	I	I	I	E	I	E
Nitration Benzol	70	I	I	I	I	I	I	I	I	I	E	I	E
Nitric Acid	70	X	X	X	X	X	G	X	E	C	E	I	I
Nitric Acid (conc)	70	X	X	X	X	X	G	X	E	C	E	I	I
Nitric Acid (Dilute)	70	X	X	E	E	G	E	X	E	E	E	I	I
Nitric Acid - 10%	70	X	X	X	X	X	X	X	C	C	E	C	G
Nitric Acid 25%	100	X	X	X	X	X	X	X	X	X	E	G	G
Nitric Acid 40% - 60%	70	X	X	X	X	X	X	X	X	X	E	G	X
Nitric Acid - Red-Fuming	70	X	X	X	X	X	X	X	X	X	E	X	X
Nitro Benzene	70	X	X	X	X	X	X	X	E	G	E	G	E
Nitroethane	70	E	E	E	E	X	E	X	E	X	E	E	E
Nitrogen Gas	70	E	E	E	E	E	E	E	E	E	E	E	E
Nitrogen Oxide UP TO 50%	100	E	I	E	E	I	E	E	E	E	E	E	E
Nitrogen Tetoxide	70	X	X	G	C	X	X	X	I	X	E	I	I
Nitroglycerine	70	I	I	I	I	I	I	I	I	I	E	I	E
Nitromethane	70	E	G	E	E	G	G	X	E	X	E	E	E
Nitrooctane	70	I	I	I	I	I	I	I	I	I	E	I	E
Nitropropane	70	C	C	E	E	X	X	X	E	X	E	E	E
Nitrosyl Chloride	70	I	I	I	I	I	I	I	I	I	E	E	E
Nitrous Acid	70	I	I	I	I	I	I	I	I	I	E	I	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Nitrous Acid up to 10%	70	I	I	I	I	I	I	I	I	I	E	E	E
n-Octane	70	I	I	I	I	I	I	I	I	I	I	G	I
Nonenes	70	I	I	I	I	I	I	I	I	I	E	I	E
Nyac 20 (WG), 30 (WG)	70	I	I	I	I	I	I	I	I	I	E	E	E
Nyac FR Fluid	70	I	I	I	I	I	I	I	I	I	E	E	E
Nyac FR200 Fluid	70	I	I	I	I	I	I	I	I	I	E	E	E
O-Chloronaphthalene	70	I	I	I	I	I	I	I	I	I	I	X	I
Octachlorotoluene	70	X	X	X	X	X	X	X	I	E	I	I	I
Octadecane	70	X	X	X	X	E	E	E	I	E	I	I	I
Octane	70	X	X	X	G	G	G	I	E	E	E	I	G
Octulene Glycol	70	I	I	I	I	I	I	I	I	I	E	I	E
Octyl Acetate	100	X	I	X	X	X	E	X	E	X	E	C	E
Octyl Alcohol	70	E	E	C	X	E	E	E	E	E	E	E	E
Octyl Aldehyde	100	X	X	X	X	X	X	X	E	X	E	I	E
Octyl Amine	100	X	X	X	X	X	X	X	C	X	E	C	E
Octyl Carbinol	100	E	I	E	E	E	E	E	E	X	E	E	E
Octynol	70	I	I	I	I	I	I	I	I	I	E	I	E
o-Dichlorobenzene	70	X	X	X	X	X	X	X	G	E	E	G	G
Oil	100	X	X	X	X	C	I	E	E	E	E	C	E
Oil of Turpentine	100	X	X	X	X	G	X	G	E	E	E	G	E
Oils, Animal	100	X	X	X	X	G	I	E	E	E	E	G	E
Oleic Acid	70	X	X	C	C	G	G	E	E	I	E	E	E
Oleum (Fuming Sulfuric Acid)	70	X	X	X	X	X	X	X	X	E	E	X	X
Oleum Spirits (Petroleum Distillate)	70	X	X	X	X	G	X	E	E	E	E	E	E
Olive Oil	70	X	X	G	G	G	G	E	E	E	E	E	E
Organic Fatty Acids	100	X	X	X	X	X	X	E	E	E	E	C	E
Othodichlorobenzene	100	X	X	X	X	X	X	X	E	E	E	C	E
Oxalic Acid	100	X	X	X	E	X	G	X	E	E	E	G	E
Oxygen 200-400F		No hose recommended											
Oxygen - Cold	70	X	X	X	X	E	E	X	E	E	E	I	E
Ozone	70	X	X	E	E	C	E	X	E	E	E	G	E
Pacemaker 150T,200T,500T(Citgo)	70	I	I	I	I	I	I	I	I	I	E	E	I
Paint (water base)	70	E	E	E	E	E	E	E	E	E	E	E	E
Paint Solvents (oil base)	70	X	X	X	X	C	E	E	E	E	E	E	E
Paint Thinner, Duco	70	X	X	X	X	X	X	X	I	G	E	I	I

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Paints (oil base)	70	X	X	X	X	X	X	X	E	E	E	E	E
Palm Oil	70	X	X	X	X	X	X	E	E	I	E	I	E
Palmitic Acid	70	G	G	G	G	G	X	E	E	E	E	E	E
Papemaker's Alum	150	E	I	E	E	I	E	E	E	E	E	E	E
Para San 10%	70	I	I	I	I	I	I	I	I	I	E	I	E
Paradichlorobenzene	70	X	X	X	X	X	X	X	I	E	E	I	I
Paradichlorobenzol	100	X	X	X	X	X	X	X	E	E	E	I	G
Paraffin Wax	150	X	X	X	X	E	G	E	E	E	E	E	E
Paraformaldehyde	70	I	I	I	I	I	I	I	I	I	E	G	E
Paraldehyde	100	X	X	X	X	X	X	C	E	X	E	I	E
Paraxylene	100	X	X	X	X	X	X	X	E	E	E	C	E
Paris Green & Lime 37%	70	I	I	I	I	I	I	I	I	I	E	I	E
p-Cymene	70	X	X	X	X	X	X	X	E	E	E	G	G
Peanut Oil	70	X	X	C	C	G	G	E	I	E	E	E	I
Pelargonic Acid	70	X	X	E	I	I	X	E	E	I	E	I	E
Pentachloroethane	100	X	X	X	X	X	X	X	E	E	E	G	E
Pentachlorophenol	70	X	X	E	I	X	I	X	I	E	E	E	I
Pentane	70	X	X	X	X	E	E	E	E	E	E	X	G
Pentanol	100	E	I	E	E	I	E	E	E	C	E	E	E
Pentasol	70	I	I	I	I	I	I	I	I	I	I	G	I
Perchloric Acid	70	X	X	E	E	E	G	X	E	E	E	G	E
Perchloroethylene	100	X	X	X	X	X	X	X	E	E	E	G	G
Petrolatum	70	I	I	I	I	I	I	I	I	I	E	I	E
Petroleum Crude	100	X	X	X	X	G	G	E	E	E	E	I	E
Petroleum Ether	100	X	X	X	X	X	X	E	E	E	E	I	E
Petroleum Oils	70	X	X	X	X	G	X	E	E	E	E	I	E
Petroleum -Above 250F		X	X	X	X	X	X	X	I	E	E	I	X
Petroleum -Below 250F		X	X	X	X	X	X	E	I	E	E	E	E
Phenetole (Phenyl Ethyl Ether)	70	X	X	X	X	X	X	X	I	X	E	I	I
Phenol	125	X	X	X	X	X	X	X	E	E	E	G	E
Phenolates	70	I	I	I	I	I	I	I	I	I	I	X	I
Phenyl Chloride	100	X	X	X	X	X	X	X	E	E	E	C	E
Phenyl Ethyl Ether	70	X	X	X	X	X	X	X	I	X	E	I	I
Phenyl Sufonic Acid	100	X	X	X	X	X	X	X	C	C	E	C	X
Phenylbenzene	70	X	X	X	X	X	X	X	I	E	E	I	I

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Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Phenylhydrazine	70	E	E	G	G	X	X	X	E	E	E	I	E
Phorone (Disopropylidene Acetone)	70	X	X	G	C	X	X	X	I	X	E	E	I
Phosphate Esters	150	X	X	E	E	X	X	X	E	X	E	C	E
Phosphoric Acid - 10%	150	E	I	E	E	I	E	E	E	X	E	I	E
Phosphoric Acid - 50%	70	G	G	E	E	E	E	G	E	E	E	E	E
Phosphoric Acid - 85%	70	C	X	E	E	G	E	X	E	E	E	G	E
Phosphoric Acid (conc.)	70	X	X	C	E	X	C	X	E	E	E	I	E
Phosphorous Oxychloride	70	X	I	X	I	X	X	I	I	I	I	I	I
Phosphorous Trichloride	70	X	X	E	E	X	X	X	I	E	E	I	I
Photographic Developers	70	I	I	I	I	I	I	I	I	I	E	G	G
Photographic Emulsions	70	I	I	I	I	I	I	I	I	I	E	E	E
Photographic Fixing	70	I	I	I	I	I	I	I	I	I	E	E	E
Phthalic Acid	70	I	I	I	I	I	I	I	I	I	E	E	E
Pickling Solution	70	X	X	C	C	X	G	X	E	C	E	I	E
Picric Acid (water solution)	70	E	G	E	E	E	E	E	I	E	E	G	I
Picric Acid - Molten	70	C	C	C	E	C	E	X	I	E	E	I	I
Pine Coating Oil	70	I	I	I	I	I	I	I	I	I	I	I	E
Pine Oil	100	X	X	X	X	X	X	C	E	E	E	E	E
Pine Tar	70	I	I	I	I	I	I	I	I	I	I	I	E
Pinene	150	X	X	X	X	X	X	E	E	E	E	E	E
Piperazine Hydrochloride	70	I	I	I	I	I	I	I	I	I	E	E	E
Piperidine	70	X	X	X	X	X	X	X	I	X	E	I	E
Pitch	70	I	I	I	I	I	I	I	I	I	E	E	E
Plating Solution -Chrome	70	X	X	E	E	X	X	I	I	E	E	E	E
Plating Solution -Others	70	X	X	E	E	X	E	E	E	E	E	I	E
Polyester Resin	70	I	I	I	I	I	I	I	I	I	E	E	E
Polyethylene Glycol	150	E	E	E	E	E	E	E	E	E	E	E	E
Polyurethane Foam	70	I	I	I	I	I	I	I	I	I	E	E	E
Polyvinyl Acetate	70	G	X	E	E	G	E	I	E	E	E	I	E
Potassium Acetate	100	X	X	E	C	X	X	X	E	X	E	E	E
Potassium Bicarbonate	70	E	E	E	E	E	E	E	E	E	E	E	E
Potassium Bisulfate	150	E	I	E	I	E	E	E	E	E	E	E	E
Potassium Bisulfite	150	E	I	E	I	E	E	E	E	E	E	E	E
Potassium Borate	70	E	E	E	E	E	E	E	I	I	I	I	I
Potassium Bromate	150	E	I	E	I	E	E	E	E	E	E	E	E

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Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Potassium Bromide	70	E	E	E	E	E	E	E	I	I	E	E	E
Potassium Carbonate	70	I	I	I	I	I	I	I	I	I	E	I	E
Potassium Chloride	150	E	I	E	I	E	E	E	E	E	E	E	E
Potassium Chromate	150	X	X	X	X	X	X	X	G	G	E	G	G
Potassium Cupro Cyanide	70	E	E	E	E	E	E	E	I	E	E	E	E
Potassium Cyanide	70	E	E	E	E	E	E	E	E	E	E	E	E
Potassium Dichromate	150	X	X	X	X	X	X	X	E	E	E	G	G
Potassium Fluoride	70	I	I	I	I	I	I	I	I	I	E	E	E
Potassium Hydrate	150	I	I	E	E	I	I	I	E	X	E	E	E
Potassium Hydroxide	150	C	C	E	I	C	C	X	E	X	E	E	G
Potassium Hypochlorite	70	G	C	C	I	C	E	X	I	I	E	I	I
Potassium Iodide	70	I	I	I	E	E	E	E	I	I	E	E	E
Potassium Nitrate	150	E	I	E	E	I	E	E	E	E	E	E	E
Potassium Nitrite	70	I	I	I	E	E	E	I	I	I	I	I	I
Potassium Permanganate	70	E	E	E	E	G	E	E	I	I	E	E	E
Potassium Phosphate	70	I	I	I	E	E	E	I	I	I	E	E	E
Potassium Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Potassium Silicate	150	E	I	E	E	I	E	E	E	E	E	E	E
Potassium Sulfate	150	E	I	E	E	I	E	E	E	E	E	E	E
Potassium Sulfide	150	E	I	E	E	I	E	E	E	E	E	I	E
Potassium Sulfite	150	E	I	E	E	I	E	E	E	E	E	E	E
Potassium Thiosulfate	70	E	I	I	I	E	E	E	I	I	E	I	E
Potassium Carbonate	150	E	I	E	I	E	E	E	E	E	E	E	E
Potassium Chloride	150	E	I	E	I	E	E	E	E	E	E	E	I
Potassium Ferro Cyanide	70	I	I	I	I	I	I	I	I	I	E	E	I
Prestone Antifreeze (Ethylene Glycol)	150	E	E	E	E	E	E	E	E	E	E	I	E
Primatol A,SP (Ag.Spray)	70	I	I	I	I	I	I	I	I	I	I	I	I
Producer Gas	70	X	X	G	X	E	E	E	I	E	E	I	I
Propane	Use only recommended Propane hose												
Propanol	100	E	I	E	E	I	E	E	E	X	E	E	E
Propionic Acid	70	E	E	E	E	X	E	X	E	I	E	E	E
Propionitrile	70	E	E	E	E	G	I	X	I	X	E	I	I
Propyl Acetate	70	X	X	G	G	X	X	X	E	X	E	E	E
Propyl Acetone	70	X	X	E	E	X	X	X	E	X	E	I	E
Propyl Alcohol	70	E	E	E	E	E	E	E	E	E	E	E	E



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Propyl Chloride	70	I	I	I	I	I	I	I	I	I	I	I	G
Propyl Nitrate	70	X	X	E	E	X	X	X	I	X	I	I	I
Propylene	70	X	X	X	X	X	X	X	I	E	E	E	X
Propylene Diamine	100	X	X	X	X	X	X	I	I	I	E	I	E
Propylene Dichloride	70	X	X	X	X	X	X	X	E	E	I	I	G
Propylene Glycol	70	E	E	E	E	E	E	E	E	E	E	E	E
Propylene Oxide	70	X	X	E	E	X	X	X	I	X	I	I	I
Purina Insecticide	70	I	I	I	I	I	I	I	I	I	E	E	I
Purothane RX Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Pydraul 115E	70	X	X	E	E	X	X	X	I	E	E	E	I
Pydraul 230E,312E,540C	70	X	X	X	X	X	X	X	E	E	E	E	E
Pydraul 625	70	I	I	I	I	I	I	I	I	I	E	E	E
Pydraul A-200	70	I	I	I	I	I	I	I	I	I	E	E	E
Pydraul F9	70	X	X	C	C	X	X	X	E	E	E	E	E
Pydraul , 10E, 29 ELT	70	X	X	E	E	X	X	X	I	E	E	E	E
Pyranol 1467	70	I	I	I	X	C	I	E	I	I	I	I	I
Pyranol 1476	70	I	I	I	X	G	I	E	I	I	I	I	I
Pyranol, Transformer Oil	70	X	X	X	X	E	C	E	E	E	E	E	E
Pyrethrum	70	I	I	I	I	I	I	I	I	I	I	I	I
Pyridine	70	X	X	G	G	X	X	X	I	X	E	G	E
Pyrogard 160, 230, 630	70	I	I	I	I	I	I	I	I	I	E	E	E
Pyrogard 51, 53, 55	70	I	I	I	I	I	I	I	I	I	E	E	E
Pyrogard C,D	70	I	I	I	I	I	I	I	I	I	E	E	E
Pyroligneous Acid	70	X	X	E	E	E	E	X	I	X	I	I	I
Pyrrrole	70	C	C	C	G	X	X	X	E	X	E	I	E
Quenching Oil	70	I	I	I	I	I	I	I	I	I	I	X	I
Quinol (Hydroquinone)	70	G	X	C	G	X	C	X	I	G	I	I	I
Quintolubric 822	70	I	I	I	I	I	I	I	I	I	E	E	I
Ramrod (Ag Spray)	70	I	I	I	I	I	I	I	I	I	E	E	I
Rando Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Range Oil	70	I	I	I	I	I	I	I	I	I	I	I	E
Rapeseed Oil	70	X	X	E	E	E	G	E	I	E	E	E	I
Red Oil (Oleic Acid)	70	X	X	X	C	G	G	E	E	F	E	E	E
Refined Oil	70	X	X	X	X	C	C	E	E	E	E	I	E
Refined Wax	100	X	X	X	X	X	X	E	E	E	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Regal Oils R & O	70	X	I	I	I	I	I	I	I	I	E	E	E
Richfield "A" 100%	70	I	I	I	I	I	I	I	I	I	E	I	E
Richfield "A" Weed Killer	70	I	I	I	I	I	I	I	I	I	E	E	E
Richfield "D" 33%	70	I	I	I	I	I	I	I	I	I	E	I	E
Rosia Oil	70	I	I	I	I	I	I	I	I	I	E	I	E
Rosin Oil	70	X	X	X	X	E	E	E	E	E	E	I	E
Rotenone & Water	70	I	I	I	I	I	I	I	I	I	E	I	E
Rubilene Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Safetytex 215	70	I	I	I	I	I	I	I	I	I	E	E	I
Sal Ammoniac (Ammonium Chloride)	150	E	E	I	E	E	E	E	E	E	E	E	E
Sal Volatile (Ammonium Carbonate)	70	E	E	E	G	G	I	X	E	E	E	E	E
Salicylic Acid	70	E	G	E	E	G	I	G	I	E	E	E	I
Salt Water	70	E	E	E	E	G	E	E	E	E	E	E	E
Saltpeter (Potassium Nitrate)	150	E	I	E	E	E	E	E	E	E	E	I	E
Santosafe W-G15, W-G20, W-G30	70	I	I	I	I	I	I	I	I	I	E	E	I
Sauerkraut	100	I	E	I	I	E	I	E	E	I	E	I	E
Secondary Buytlacetate	70	I	I	I	I	I	I	I	I	I	E	I	E
Sevin	70	I	I	I	I	I	I	I	I	I	E	G	G
Sewage	70	G	G	G	G	G	E	E	E	E	E	E	E
SFR Fluid B (Shell)	70	I	I	I	I	I	I	I	I	I	E	E	I
SFR Fluid C (Shell)	70	I	I	I	I	I	I	I	I	I	E	E	I
Shell DD	70	I	I	I	I	I	I	I	I	I	I	I	E
Shellac	70	I	I	I	I	I	I	I	I	I	E	E	E
Silica Gell	70	I	I	I	I	I	I	I	I	I	E	I	E
Silicate Esters	70	X	X	X	X	E	E	G	I	E	I	I	I
Silicate of Soda	70	E	E	E	E	E	E	E	E	E	E	I	E
Silicone Greases	70	E	E	E	E	E	E	E	I	E	E	G	I
Silicone Oils	70	E	E	E	E	E	E	E	I	E	E	G	I
Silver Cyanide	70	E	I	I	I	E	I	I	I	I	E	E	I
Silver Nitrate	70	E	E	E	E	E	E	E	E	E	E	E	E
Silver Salt	70	I	I	I	I	I	I	I	I	I	I	I	E
Skydrol 500	70	X	X	G	E	X	X	X	E	X	E	E	E
Skydrol 7000	70	X	X	E	E	X	X	X	E	G	E	E	E
Slaked Lime (Calcium Hydroxide)	70	E	E	E	E	E	E	E	E	E	E	I	E
Soap Oil	70	X	X	X	X	C	C	E	E	E	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Soap Solutions	70	G	G	E	E	G	E	E	E	E	E	E	E
Soda Ash (Sodium Carbonate)	70	E	E	E	E	E	E	E	E	E	E	E	E
Soda Niter (Sodium Nitrate)	70	E	E	E	E	E	E	G	E	I	E	I	E
Soda Water	70	E	E	E	E	E	E	E	E	E	E	E	E
Soda, Caustic	100	E	C	E	E	I	I	C	E	E	E	E	E
Soda, Lime	100	E	I	E	E	E	C	C	E	X	E	E	E
Soda, Niter	100	E	I	E	E	I	E	E	E	E	E	E	E
Sodan	70	I	I	I	I	I	I	I	I	I	E	I	E
Sodium Acetate	70	E	C	E	E	G	E	G	E	X	E	E	E
Sodium Aluminate	100	E	I	E	E	I	E	E	E	E	E	E	E
Sodium Benzoate	70	I	I	I	I	I	I	I	I	I	E	E	I
Sodium Bicarbonate	150	E	I	E	E	I	E	E	E	E	E	E	E
Sodium Bisulfate	150	E	I	E	E	I	E	E	E	E	E	E	E
Sodium Bisulfite	70	E	G	E	E	E	E	E	E	E	E	E	E
Sodium Borate	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Carbonate	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Chlorate	70	E	E	E	E	E	E	E	I	I	E	E	I
Sodium Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Chromate	150	X	X	E	X	X	X	X	X	X	E	I	X
Sodium Cyanide	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Dichromate	150	X	X	E	X	X	X	I	E	E	E	E	E
Sodium Diphosphate	70	E	E	E	I	G	I	E	I	I	I	I	I
Sodium Ethoxide	70	I	I	I	I	I	I	I	I	I	E	I	E
Sodium Ferrocyanide	70	I	I	I	I	I	I	I	I	I	E	E	I
Sodium Fluoroaluminate 10%	70	I	I	I	I	I	I	I	I	I	I	I	E
Sodium Fluoride	70	E	E	E	E	E	I	E	E	I	E	G	E
Sodium Hydrate	150	X	X	E	X	X	X	X	E	X	E	E	E
Sodium Hydrochlorite 20%	100	X	X	X	X	X	X	X	E	I	E	E	E
Sodium Hydrosulfide	70	I	I	I	I	I	I	I	I	I	I	I	I
Sodium Hydrosulfite	100	I	I	I	I	I	I	I	E	I	E	E	E
Sodium Hydroxide	70	E	E	E	E	G	E	G	E	G	E	E	E
Sodium Hydroxide 50%	180	I	I	I	I	I	I	I	I	I	I	G	I
Sodium Hydroxide -50%	150	X	X	E	X	X	X	X	E	X	E	E	I
Sodium Hypochlorite	100	X	X	X	X	X	X	X	X	C	E	G	G
Sodium Hypochlorite -5%	70	I	I	I	I	I	I	I	I	I	I	G	G

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Sodium Hyposulfate	70	I	I	I	I	I	I	I	I	I	I	I	I
Sodium Metaphosphate	70	E	E	E	E	E	E	E	G	E	E	E	E
Sodium Nitrate	70	E	E	E	E	E	E	G	E	I	E	E	E
Sodium Nitrite	70	I	I	I	I	E	E	I	I	I	I	I	I
Sodium Perborate	70	G	G	E	E	G	G	G	E	E	E	E	E
Sodium Peroxide	70	G	G	E	E	E	E	G	E	E	E	E	E
Sodium Phosphate	70	E	E	E	E	G	E	E	E	E	E	E	E
Sodium Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Sodium Silicate	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Sulfate	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Sulfide	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Sulfite	70	E	E	E	E	E	E	E	E	E	E	E	E
Sodium Thiosulfate (STPP)	150	E	I	E	E	I	E	E	E	E	E	E	I
Solnus Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Solvac 1535GI	70	I	I	I	I	I	I	I	I	I	I	I	I
Solvesso	70	I	I	I	I	I	I	I	I	I	E	I	E
Soybean Oil	70	X	X	E	G	E	E	E	E	E	E	E	E
Spent Acid	70	I	I	I	I	I	I	I	I	I	E	E	E
Stannic Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Stannic Sulfide	70	E	E	E	E	E	E	E	E	E	E	E	E
Stannous Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Stannous Sulfide	70	E	E	E	E	E	E	E	E	E	E	E	E
Stanoil No 15,18,25,31,35,51	70	I	I	I	I	I	I	I	I	I	E	E	I
Starch	70	I	I	I	I	I	I	I	I	I	E	E	I
Stauffer Jet 1	70	I	I	I	I	I	I	I	I	I	E	E	I
Stauffer Jet 2	70	I	I	I	I	I	I	I	I	I	E	E	I
Staysol FR	70	I	I	I	I	I	I	I	I	I	E	E	I
Steam, Over 300F	70	X	X	C	C	X	X	X	X	X	E	I	X
Steam, Under 300F	70	C	X	E	E	C	X	X	X	X	E	E	X
Stearic Acid	70	C	C	G	G	G	G	E	E	I	E	E	E
Stearin	70	I	I	I	I	I	I	I	I	I	E	E	I
Stoddard Solvent (Petroleum Distillates)	70	X	X	X	X	G	X	E	E	E	E	G	E
Straight Synthetic Oils	70	I	I	I	I	I	I	I	I	I	I	I	I
Styrene	70	X	X	X	X	X	X	X	E	G	E	G	E
Sucrose Solution	70	E	E	E	E	E	E	E	E	E	E	E	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Sugar Liquid	70	E	E	E	E	E	E	E	E	E	E	E	E
Sulfamic Acid	70	G	G	E	I	E	E	G	E	E	E	X	G
Sulfite Liquors	70	E	E	E	E	E	E	E	I	E	I	I	I
Sulfur	70	X	X	E	E	E	E	X	E	E	E	I	E
Sulfur (under 200F)	70	I	I	I	I	I	I	I	I	I	I	I	I
Sulfur Chloride	70	X	X	X	X	C	E	C	E	E	E	G	E
Sulfur Dioxide (dry)	70	G	G	G	E	C	G	C	E	E	E	E	X
Sulfur Dioxide (liquidfied under pressure)	70	X	X	G	E	X	X	X	I	E	I	I	X
Sulfur Dioxide ( moist)	70	X	X	E	E	I	I	I	I	I	E	E	I
Sulfur Dioxide (wet)	70	X	X	E	E	G	E	X	I	E	E	E	X
Sulfur Hexafluoride	70	X	X	E	E	E	E	E	I	E	I	E	I
Sulfur Trioxide	70	G	G	E	E	C	C	C	E	E	E	G	E
Sulfuric Acid ( Conc)	70	X	X	X	C	X	G	X	E	E	E	I	G
Sulfuric Acid-10%	70	E	E	E	E	E	E	E	E	E	E	E	E
Sulfuric Acid-25%	70	E	G	E	E	E	E	F	E	E	E	E	E
Sulfuric Acid-50%	70	G	C	G	G	G	E	C	E	E	E	E	E
Sulfuric Acid-75%	70	X	X	G	G	X	E	X	E	E	E	E	E
Sulfuric Acid-95%	70	X	X	X	C	X	G	X	E	E	E	X	E
Sulfuric Acid-Fuming	70	X	X	X	X	X	X	X	X	E	E	I	X
Sulfuric Molten	70	X	X	E	E	X	G	X	X	E	I	I	X
Sulfurous Acid	70	G	C	G	G	G	E	C	E	E	E	E	E
Sun R & O Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
SunSAFE F	70	I	I	I	I	I	I	I	I	I	E	E	I
Suntac HP Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Suntac WR Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Sunvis Oils 700	70	I	I	I	I	I	I	I	I	I	E	E	I
Synthetic Oil (Citgo)	70	I	I	I	I	I	I	I	I	I	E	E	I
Tall Oil	70	X	X	X	X	G	C	E	E	E	E	E	E
Tallow	70	X	X	G	E	G	G	E	E	E	E	E	E
Tanner's Oil	70	I	I	I	I	I	I	I	I	I	E	I	E
Tannic Acid	70	E	G	E	E	E	E	E	E	E	E	E	E
Tar-Bituminous	70	X	X	X	X	E	E	E	I	E	E	E	X
Tartaric Acid	70	G	C	E	E	E	E	E	E	E	E	E	E
Tellus Oils	70	I	I	I	I	I	I	I	I	I	E	E	I
Tenol Oils	70	I	I	I	I	I	I	I	I	I	E	E	I

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Tergitol	70	I	I	I	I	I	I	I	I	I	I	G	I
Terpineol	70	X	X	G	G	X	X	G	E	E	E	E	E
Terresstic	70	I	I	I	I	I	I	I	I	I	E	E	I
Tertiary Butly Alcohol	70	E	E	E	E	E	E	X	E	E	E	I	E
Tertiary Butly Catechol	70	E	E	E	E	E	E	E	E	E	E	I	E
Tertiary Butly Mercaptan	70	X	X	X	X	X	X	X	I	E	E	I	I
Tetra Chloride	70	I	I	I	I	I	I	I	I	I	I	I	E
Tetrabromoethane	70	X	X	X	X	X	X	X	I	E	I	I	I
Tetrabromomethane	70	X	X	X	X	X	I	X	I	E	E	I	I
Tetrabutyl Titanate	70	E	E	E	E	E	E	E	I	E	I	I	I
Tetrachlorobenzene	70	X	X	X	X	X	X	X	G	G	E	G	G
Tetrachloroethane	70	X	X	C	X	X	X	X	E	E	E	I	G
Tetrachloroethylene	70	X	X	X	X	X	X	X	E	E	E	I	E
Tetrachloromethane	70	X	X	X	X	X	X	X	G	E	E	G	E
Tetrachloronaphthalene	70	X	X	X	X	X	X	X	E	G	E	G	F
Tetradecanol	100	E	I	E	E	I	E	E	E	X	E	E	E
Tetraethylene Glycol	150	E	I	E	E	I	E	E	E	E	E	E	E
Tetraethylead (TEL)	70	X	X	X	X	E	X	E	E	E	E	G	E
Tetrahydrofuran	70	I	I	I	I	I	I	I	I	I	E	I	G
Tetrahydrofuran (THF)	70	X	X	G	G	X	X	X	E	X	E	X	I
Tetrahydronaphthalene	70	X	X	X	X	X	X	X	E	E	E	I	E
Tetralin (Tetrahydronaphthalene)	70	X	X	X	X	X	X	X	E	E	E	X	E
Thionyl Chloride	70	X	X	X	C	X	X	X	I	G	E	I	I
Thiophene (Thiofuran)	70	X	X	C	X	X	I	X	I	C	E	I	I
Tin Chloride	100	E	I	E	I	I	I	I	E	I	E	E	E
Titanium Tetrachloride	70	X	X	X	X	X	X	G	I	E	E	X	E
Toluene	70	X	X	X	X	X	X	X	E	E	E	G	E
Toluene Diisocyanate	70	X	X	E	E	X	X	X	I	G	E	I	I
Toluidien	70	X	X	X	I	I	X	X	E	E	E	I	I
Toluidine	100	I	I	I	I	I	I	I	I	I	E	I	X
Toluol (Toluene)	70	X	X	X	X	X	X	X	E	E	E	I	E
Toxophene 12 %	70	I	I	I	I	I	I	I	I	I	E	I	E
Transformer Oil (Akarel Types)	70	I	I	I	I	I	I	G	I	I	E	G	E
Transformer Oil (Petroleum Type)	70	X	X	X	X	E	C	G	E	E	E	E	E
Transformer Oil ( Petrolium)	70	I	I	I	I	I	I	G	E	I	E	I	E

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Fluorocarbon (Viton/Fluorel)	Fluorocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Transmission Fluid - Automatic	70	X	X	X	X	G	C	E	E	E	E	E	E
Transmission Fluid - Type A	70	X	X	X	X	E	G	E	E	E	E	E	E
Transmission Oil A	70	I	I	I	I	I	I	E	I	I	E	G	G
Triacetin	70	E	E	E	E	E	E	E	E	X	E	I	E
Triaryl Phosphate	70	X	X	E	E	X	X	X	I	E	I	I	I
Tributoxyethyl Phosphate	70	G	G	E	E	X	X	X	E	E	E	E	E
Tributyl Amine	70	I	I	I	I	I	I	I	I	I	E	I	E
Tributyl Mercaptan	100	X	X	E	X	X	X	X	E	I	E	E	E
Tributyl Phosphate	70	E	C	E	E	X	X	X	E	X	E	E	E
Trichloro Benzene	70	X	X	X	X	X	X	X	E	E	E	I	E
Trichloroacetic Acid	70	C	E	E	E	X	X	E	E	C	E	I	G
Trichloroethane	70	X	X	X	X	X	X	X	E	E	E	I	E
Trichloropropane	100	X	X	X	X	X	X	X	G	E	E	I	E
Trichloroethylene	70	X	X	X	X	X	X	X	E	E	E	E	G
Tricresyl Phosphate	70	C	E	E	C	G	X	X	E	E	E	E	E
Tridecanol	100	E	I	E	E	I	E	E	E	X	E	E	E
Triethanolamine (TEA)	70	E	F	E	E	E	E	E	E	X	E	E	E
Triethyl Aluminum	70	X	X	C	C	X	X	X	I	E	I	I	I
Triethyl Borane	70	X	X	C	C	X	X	X	I	E	E	I	I
Triethylene Glycol	70	E	E	E	I	I	E	E	E	E	E	I	E
Trinitrotoluene	70	X	X	X	X	E	E	X	I	E	E	I	I
Trioctyl Phosphate	70	X	X	E	E	X	X	X	I	G	I	I	I
Triphenyl Phosphate	70	X	X	G	I	I	G	X	E	G	E	I	E
Trisodium Phosphate (TSP)	70	E	E	E	E	E	E	E	E	E	E	I	E
Tung Oil	70	X	X	C	C	E	G	E	E	E	E	G	E
Turbine Oil	70	X	X	X	X	X	X	E	E	E	E	I	E
Turpentine	70	X	X	X	X	X	X	E	E	E	E	X	E
Tycol A Turbio 37, 50, 58 & 60	70	I	I	I	I	I	I	I	I	I	E	E	I
Tyco Avalon 50, 57, 60	70	I	I	I	I	I	I	I	I	I	E	E	I
Ucon Hydrolube Oils	70	I	I	I	I	I	I	I	I	I	E	I	E
Ucon Hydrolube 15CP, 200CP	70	I	I	I	I	I	I	I	I	I	E	E	I
Ucon Hydrolube 275CP, 300CP, 550CP	70	I	I	I	I	I	I	I	I	I	E	I	I
Ucon M1	70	I	I	I	I	I	I	I	I	I	E	E	I
Undecyl Alcohol (Undecanol)	70	E	E	E	I	I	E	E	E	E	E	I	E
Union Hydraulic Tractor Fluid	70	I	I	I	I	I	I	I	I	I	E	E	I

# Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Unsymmetrical Dimethylhydrazine	70	E	E	E	E	E	E	E	I	X	I	I	I
Uran	70	I	I	I	I	I	I	I	I	I	I	I	E
Urea ( Carbamide)	70	E	I	E	I	E	E	E	E	I	E	E	E
Urine	70	I	I	I	E	E	E	I	E	I	E	I	E
V.M. & P. Naptha	70	I	I	I	I	I	I	I	I	I	E	I	E
Valeric Acid	70	E	I	E	E	X	I	X	I	I	E	I	I
Vamish	70	X	X	X	X	X	X	E	E	E	E	G	E
Vegetable Oils	70	X	X	E	C	C	G	E	E	E	E	I	E
Versilube F-50	70	E	E	E	E	E	E	E	I	E	E	I	I
Vinegar (Diluted Acetic Acid)	70	G	G	G	G	F	E	C	E	E	E	E	E
Vinyl Acetate	70	X	X	E	I	X	E	X	E	X	E	E	E
Vinyl Benzene	70	X	X	X	X	X	X	X	E	E	E	I	E
Vinyl Chloride	70	C	C	G	X	X	X	X	E	E	E	G	E
Vinyl Ether	70	I	I	I	I	I	I	I	I	I	I	I	C
Vinyl Fluoride	70	I	I	I	I	I	I	I	I	I	E	E	E
Vinyl Toluene	100	X	X	X	X	X	X	X	E	E	E	I	E
Vinyl Trichloride	100	X	X	X	X	X	X	X	E	E	E	C	E
Vitrea Oils	70	I	I	I	I	I	I	I	I	I	E	E	E
Wagner 21B Brake Fluid	70	E	E	E	E	E	E	C	I	X	E	I	I
Water	70	E	E	E	E	E	E	E	E	E	E	E	E
Water ( Brine)	70	E	E	E	E	E	E	E	E	E	E	E	E
Water (Deionized)	70	E	E	E	E	E	E	E	E	E	E	E	E
Water (Distilled)	70	E	E	E	E	E	E	E	E	E	E	E	E
Water (Potable)	70	E	E	E	E	E	E	I	E	E	E	E	E
Water Glycols	70	E	E	E	E	E	E	E	E	E	E	E	E
Water in Oil Emulsions	70	I	I	I	I	I	I	I	I	I	E	I	E
Wax (Petroleum)	70	X	X	X	X	E	G	E	E	E	E	I	E
Whiskey , Wines	70	E	E	E	E	E	E	E	E	E	E	G	E
White Oil	70	X	X	X	X	X	G	X	E	E	E	I	E
White Pine Oil	70	X	X	X	X	X	X	G	I	E	I	I	I
White Vitriol (Zinc Sulfate)	70	E	E	E	E	E	E	E	E	E	E	I	E
Wood Alcohol (Methyl Alcohol)	70	E	E	E	E	E	E	E	E	G	E	I	E
Wood Oil	70	X	X	X	X	F	C	E	E	E	E	E	E
Xylene	70	X	X	X	X	X	X	X	E	E	E	E	X
Xylidine (Dimethyl Aniline)	70	X	X	C	G	X	X	X	E	X	E	I	E



## Rubber Chemical Resistance Chart

Chemical	Tube Compounds												
	Temp °F	Natural Rubber (NR)	SBR	Butyl (IIR)	EPDM	Neoprene (CR)	Hypalon (CSM)	Nitrile (NBR)	Crosslinked Polyethylene (XLPE)	Flurocarbon (Viton/Fluorel)	Flurocarbon Plastic (Teflon/TFE/FEP)	Modified Cross-link	UHMWP
Xyolo (Xylene)	70	X	X	X	X	X	X	X	E	E	E	I	X
Zeolites	70	E	E	E	E	E	E	E	I	E	I	I	I
Zeric	70	I	I	I	I	I	I	I	I	I	E	E	I
Zinc Acetate	70	E	X	E	E	G	E	G	I	X	E	E	I
Zinc Carbonate	70	I	I	I	I	I	I	I	I	I	I	I	E
Zinc Chloride	70	E	E	E	E	E	E	E	E	E	E	E	E
Zinc Chromate	70	I	I	I	I	I	I	I	I	I	E	E	E
Zinc Oxide	70	I	I	I	I	I	I	I	I	I	I	I	I
Zinc Phosphate	100	X	X	X	X	X	X	E	E	I	E	I	E
Zinc Salts	70	I	I	I	I	I	I	I	I	I	E	I	E
Zinc Sulfate	70	E	E	E	E	E	E	E	E	E	E	E	E

## Chemical Resistance Information

This document provides essential information that will facilitate the safe use of plastic resins and composite type chemical hoses.

Chemical hose users are cautioned that this chemical resistant information has been developed from generally accepted industry standards. The ratings listed beneath each resin are the base ratings for the chemicals listed. This rating is based on the application temperature not exceeding 70° F (21.1° C) unless otherwise specified.

The degree to which a resin will resist the effects of a specific chemical will depend on several variables.

For safety, in each application it is recommended that the hose have the highest resistant tube available for the chemical being transferred.

1. **Concentration** of the chemical is very significant (some chemicals may react with resins differently, based on the level of concentration).
2. **Temperature:** as the temperature increases the deteriorative effect of a chemical may greatly increase on a resin.
3. **Time:** the longer the duration the chemical is in contact with the resin, the greater the deteriorative effect.
4. **Stability of the Chemical:** Chemical solutions (combination of different chemicals) may increase the deteriorative effect.
5. **Resin Grade:** There are different grades of specific resin used in hose. The grade of resin used may affect the resistance level of the hose to a specific chemical. It is recommended that only hose listed for chemical service be used.
6. **Safety:**
  - a. Chemical hose tube must be inspected for discoloration, cracks or damage before each use, in accordance with the Novaflex "Proper Use, Care and Maintenance" booklet.
  - b. Never use damaged hose. Remember all hose will fail in time! Err on the side of safety. When in doubt about the condition of a hose, remove it from service!
  - c. Chemical hose should have the ends capped when not in use to keep out moisture and other elements that can cause chemical reactions.
  - d. Chemical hose should be cleaned after use to remove chemical residue.

The information provided within is for informational purposes only. We have made every effort to ensure the accuracy of the provided information and assume no responsibility for any loss or damage due to errors or omissions or to the use or misuse of any information supplied. It is impossible to test all products under all conditions to which they might be subjected in the field. It is therefore the buyer and/or end users' responsibility to test all products under the conditions that duplicate the service conditions prior to installation. All improvements, all specifications are subject to change without prior notice. It is the buyer and/or end users' responsibility to review our complete **Terms and Conditions of Sale** located on our web sites at: [www.novaflex.com](http://www.novaflex.com) | [www.z-flex.com](http://www.z-flex.com) | [www.flexmaster.com](http://www.flexmaster.com).