

Chemical Resistance Data

	N	H	P	U	V		N	H	P	U	V		N	H	P	U	V
Acetaldehyde	G	G	L	G	P	Carbon Bisulfide	G	L	P	L	P	†Ethylene Glycol	G	G	G	L	G
Acetic Acid	L	L	G	L	G	Carbon Disulfide	G	L	P	L	P	Ethylene Oxide	G	L	L	L	NT
Acetic Anhydride	L	L	G	L	P	Carbon Monoxide	G	G	G	G	G	Fatty Acid	G	G	P	G	G
Acetone	G	L	L	P	P	Carbon Tetrachloride	G	P	P	P	L	Ferric Chloride	L	NT	G	NT	G
Acetyl Bromide	P	P	P	P	P	Carboniv Acid	G	L	G	L	G	Ferric Sulphate	G	G	G	G	G
Acetyl Chloride	P	P	P	P	P	Castor Oil	G	L	G	L	G	Fluoboric Acid	NT	P	G	P	GL
Acetylene	G	G	G	G	NT	Caustic Potash (>20%)	L	L	G	L	L	Fluorine	P	P	P	P	L
Air	G	G	G	G	G	Caustic Potash (<20%)	G	L	G	L	G	Fluorosilicic	NT	NT	G	P	GL
*Alcohols	G	L	G	L	G	Caustic Soda (>20%)	L	L	G	L	L	Formaldehyde	G	L	G	L	G
Aluminum Chloride	P	NT	G	NT	G	Caustic Soda (<20%)	G	L	G	L	G	Formic Acid	P	P	GL	P	GL
Aluminum Sulphate	P	NT	G	NT	G	Celluloses <i>Union Carbide</i>	G	P	P	P	P	Freon	G	L	L	L	L
Alums	P	NT	G	NT	G	Cellulubes <i>Celanese</i> (Hydraulic						* Fruit Juices	G	G	G	G	G
Ammonia Gas	P	P	P	P	P	Fluid, Phosphate Ester Base)	G	P	P	P	P	Fuel Oil (Aromatic Gas)					
Ammonium Chloride	G	G	G	G	G	Chloracetic Acid	P	P	L	P	P	100 Octane	G	G	L	G	L
Ammonium Hydroxide	P	P	P	P	P	Chloroform	G	P	P	P	P	Fuel Oil	G	G	LP	G	L
Ammonium Nitrate	G	L	G	G	G	Chlordane	G	G	G	G	L	Furfuryl Alcohol	G	G	G	G	G
Ammonium Phosphate	G	L	G	G	G	Chlorinated Solvents	G	P	L	P	P	Galic Acid (<20%)	G	L	G	L	G
Ammonium Sulphate	G	L	G	G	G	Chlorine (Dry)	P	P	P	P	L	** Gas (Natural)	G	G	G	G	G
Amyl Acetate	G	L	P	L	P	Chlorine (Water) (<20%)	L	P	G	L	G	Gas Oil	G	G	LP	G	L
Amyl Alcohol	G	G	G	G	G	Chromic Acid	P	P	GL	P	L	Gasoline	G	G	LP	G	L
Anethole	G	NT	NT	NT	NT	Chromium Salts	G	G	G	G	G	Gasoline (Aromatic)	G	G	LP	G	L
Aniline	L	P	P	P	L	*Cider	G	G	G	G	G	Gasoline (Non-Aromatic)	G	G	LP	G	G
Animal Oils	G	G	P	G	G	Citric Acid	G	L	G	L	G	Gelatin	G	G	G	G	G
Antimony Salts	G	G	G	G	G	Coal Gas	G	G	G	G	G	Glucose	G	G	G	G	G
Apoclor <i>Monsanto</i> (Chlorinated						Copper Chloride	L	G	G	G	G	Glue (Depends on type)	G	G	G	G	G
Hydrocarbon Hydraulic Fluid)	G	L	L	L	L	Copper Sulphate	G	G	G	G	G	†Glycerine	G	G	G	G	G
Aromatic Hydrocarbons	G	L	P	L	P	*Corn Oil	G	G	G	G	G	†Glycol	G	G	G	L	G
Arsenic Salts	G	G	G	G	G	Cottonseed Oil	G	G	G	G	G	Greases	G	G	L	G	G
Asphalt	G	G	G	G	G	Creosote	P	P	L	P	L	Heavy Water (D ₂ O)	G	G	NT	NT	NT
Auto Transmission Fluid	G	G		G		Cresols	P	P	L	P	L	Heptane	G	G	P	G	L
Barium Chloride	G	G	G	G	G	Cresylic Acid	P	P	L	P	L	Hexane	G	G	P	G	L
Barium Salts	G	G	G	G	G	Crude Petroleum	G	L	P	G	G	†Houghto Safe <i>Houghton</i> 600					
Basic Copper Arsenate	G	G	G	G	G	Cupric Sulphate	L	L	G	L	G	Series (Hyd. Fluid Water					
Benzaldehyde	G	G	L	G	P	Cyclohexane	G	G	NT	G	NT	Glycol Base)	G	L	G	G	G
Benzene	G	L	P	L	P	Cyclohexanone	G	G	P	G	P	†Houghto Safe <i>Houghton</i> 1000					
Benzoic Acid	G	P	G	P	G	Decalin	G	NT	NT	NT	NT	Series (Phosphate Ester					
Benzol (Benzene)	G	L	P	L	P	Diacetone Alcohol	G	L	G	L	P	Base)	G	L	P	L	P
Benzyl Alcohol	L	L	L	L	L	Diammonium Phosphate	G	L	G	P	G	Hydraulic Fluid Petroleum Base	G	G	P	G	P
Borax	G	G	G	G	L	Dibutyl Phthalate	G	L	L	L	NT	†Hydraulic Fluid Water Glycol					
Bordeaux Mixture	G	G	G	G	G	Diesel Fuel	G	G	L	G	L	Base	G	G	G	G	G
Boric Acids	G	G	G	G	G	Diethanolamine (20% conc.)	G	L	NT	L	NT	†Hydraulic Fluid	G	L	P	L	P
Boric Copper Sulphate	G	G	G	G	G	Diethyl Ether	G	L	G	L	L	Phosphate Ester					
Bromine	P	P	P	P	L	Dioctyl Phosphate	G	L	P	L	P	Hydraulic Oil	G	G	P	G	NT
Butanol	G	G	G	G	G	Dioctylphthalate	G	L	P	L	P	Hydrochloric Acid (10%)	G	P	G	L	G
*Butter	G	G	G	G	G	Enamels	G	G	G	G	G	Hydrocyanic Acid	P	NT	G	NT	G
Butyl Acetate	G	L	P	L	P	Essential Oils	G	G	L	G	G	Hydrofluoric Acid	P	P	L	P	L
Calcium Arsenate	G	G	G	G	G	*Ethanol	G	L	L	L	L	Hydrogen Gas	G	G	G	G	G
Calcium Bisulphide	G	G	G	G	L	Ether	G	L	G	L	L	Hydrogen Peroxide (dil.)	G	G	G	G	G
Calcium Chloride	G	G	G	G	G	Ethyl Acetate	G	L	G	L	P	Hydrogen Peroxide (conc.)	P	P	G	P	L
Calcium Hydroxide (<20%)	G	L	G	L	G	*Ethyl Alcohol	G	L	G	L	L	Hydrogen Sulphide	L	L	G	NT	G
Calcium Hypochlorite	G	L	G	L	G	Ethyl Chloride	G	P	P	P	P	†Hydrolube <i>Union Carbide</i> -					
Calcium Salts	G	G	G	G	G	Ethylene Chlorhydrin	P	P	NT	P	P	(Hydraulic Fluid Water Glycol					
Carbolic Acid	P	P	G	P	P	Ethylene Dichloride	G	P	L	P	P	Base)	G	L	G	G	G

Hose Material Key

N = Nylon
H = Polyester
P = Polyolefin
U = Polyurethane
V = PVC - Polyvinyl Chloride

Resistance Rating Key

G = Good
L = Limited
P = Poor
NT = Not Tested

This chart is intended to serve as a guide and does not guarantee suitability of hose material with the chemicals listed. Final selection of materials is dependent on many factors including variations in temperature, pressure or duration of exposure.

Chemical Resistance Data

	N	H	P	U	V		N	H	P	U	V		N	H	P	U	V
†Irus Shell 902 Hydraulic Fluid						Oleic Acid	G	G	P	G	L	Sodium Sulphate	G	G	G	L	G
(Water-Oil Emulsion)	G	G	L	G	G	OS 45 Monsanto Hydraulic Fluid						Sodium Sulphide	G	G	G	G	G
Isocyanates	G	G	G	G	NT	(Silicate Ester Base)	G	L	P	L	NT	Sodium Thiosulphate	G	P	G	G	G
Isopropyl Acetate	G	L	L	L	P	Oxalic Acid (-30%)	G	L	G	L	G	Solutions/Emulsions 2-4D					
Kerosene	G	G	LP	G	L	Oxygen	Refer to Factory					DDT Preparation Hydroxy					
Ketones	G	L	G	L	P	Ozone	G	G	P	G	G	Quinoline	G	NT	NT	NT	G
Lacquer Solvents	G	L	G	L	P	Paint (Oil Base)	G	G	L	G	L	Stannous Chloride	L	G	G	G	G
Lactic Acid	G	NT	L	NT	G	Paint Solvents (Oil Base)	G	L	L	L	L	Steam	P	P	P	P	P
Lard	G	G	G	G	G	Palmitic Acid	G	G	G	G	G	Stearic Acid	G	G	G	G	G
Lead Arsenate	G	G	G	G	G	Pentane	G	G	P	G	L	Stearin	G	G	NT	G	NT
Lead Sulphate	G	G	G	G	G	Perchloric Acid	P	P	G	P	L	Stodard Solvent	G	P	L	P	L
Lead Tetramethyl	G	G	NT	G	NT	Perchloroethylene	G	P	P	P	L	Styrene	G	L	NT	L	NT
Lime	G	G	G	G	G	Petroleum Oils (Sour)	G	L	L	G	G	Sulphur	G	G	G	G	G
Linseed Cake	G	G	P	G	G	Petroleum Oils (Refined)	G	G	L	G	G	Sulphur Dioxide	P	P	G	P	L
Linseed Oil	G	G	P	G	G	Phenolates	L	L	L	G	L	Sulphur Trioxide	L	P	G	P	G
Lubricating Oils, Petroleum						Phenols	P	P	G	P	L	Sulphuric Acid (dil.)	L	LP	L	LP	G
Base	G	G	L	G	G	Phosphoric Acid	G	P	G	P	G	Sulphuric Acid (conc.)	P	P	L	P	P
†Lubricating Oils, Diester Base	G	L	P	L	NT	Picric Acid	L	P	G	P	G	Sulphurous Acid	P	LP	L	LP	L
Magnesium Chloride	G	G	G	G	G	Potash (Potassium Hydroxide)	L	P	G	P	L	Tannic Acid	G	L	G	L	G
Magnesium Hydroxide (<20%)	G	L	G	L	G	Potassium Chloride	G	G	G	G	G	Tar Oil	G	G	G	G	G
Magnesium Sulphate	G	G	G	G	G	Potassium Hydroxide						Tartaric Acid	G	G	G	G	G
Maleic Acid	G	L	G	L	G	(50% conc.)	L	P	G	P	L	Toluene	G	L	P	L	P
Mercuric Chloride	G	G	G	G	L	Potassium Nitrate	G	G	G	G	G	Toluol	G	L	P	L	P
Mercury	G	G	G	G	G	Potassium Permanganate						Tributyl Phosphate	G	L	P	L	P
**Methane	G	G	NT	G	P	(5% conc.)	P	P	P	P	G	Tricesylphosphate	G	L	P	L	P
Methanol	G	L	G	L	P	Potassium Sulphate	G	G	G	G	G	Trichloroacetic Acid	P	P	GL	P	L
Methyl Acetate	G	L	G	L	P	Propane	G	G	G	G	G	Trichloroethylene	G	P	P	P	L
Methyl Bromide	L	P	P	P	P	†Pydraul (Stauffer) F-9, 150, 600,						†Trisodium Phosphate Solution	G	L	NT	L	G
Methyl Chloride	G	P	P	P	P	625	G	L	P	L	P	Turpentine	G	G	P	G	G
Methyl Sulphate	G	G	NT	G	NT	Pyrethrum	G	G	G	G	G	†Ucon Union Carbide (Hydraulic					
Methylethylketone MEK)	G	L	G	L	P	Pyridine	L	L	G	G	P	Fluid Water Glycol Base	G	L	G	G	G
Methylisobutylketone (MIBK)	G	L	G	L	P	†Sea Water	G	G	G	G	G	Urea	G	L	G	L	G
*Milk	G	G	G	G	G	†Skydrol Monsanto 500, 7000	G	P	P	P	P	Uric Acid	G	P	G	P	G
Mineral Oil	G	G	LP	G	G	†Soap Solution (conc.)	G	G	L	G	G	Varnish	G	G	L	G	P
Molasses	G	G	G	G	G	*† Soda Water	G	G	G	G	G	Vinegar	G	L	G	L	G
Mustard	G	G	NT	G	NT	Sodium Bicarbonate	G	G	G	G	G	†Water (150°F)	G	G	G	G	G
Naphtha	G	L	P	L	P	Sodium Bisulfite	G	G	G	G	G	White & Bagley No. 2190 Cutting					
Naphthalene	G	L	P	L	P	Sodium Borate	G	G	G	G	G	Oil	G	NT	NT	NT	NT
Nickel Chloride	P	P	G	NT	P	Sodium Carbonate	G	G	G	G	G	*Wine	G	G	G	G	G
Nicotine	G	G	G	G	G	Sodium Chloride	G	G	G	G	G	Wool Oil	G	G	G	G	G
Nitric Acid (<20%)	L	L	G	L	G	Sodium Cyanide	G	G	G	G	G	Xylol	G	L	P	L	P
Nitric Acid (>20%)	L	P	L	P	G	Sodium Hydroxide (<20%)	G	L	G	L	G	Xylene	G	L	P	L	P
Nitrobenzene	G	P	P	P	P	Sodium Hypochlorite	L	L	G	L	G	Zinc Chloride	G	G	G	G	G
*Nitrous Oxide	G	G	LP	G	G	Sodium Nitrate	G	G	G	G	G	Zinc Hydrate	P	L	G	L	G
Oil	G	G	L	G	L	†Sodium Phosphate Solution	G	G	G	G	G	Zinc Sulphate	P	L	G	L	G
*Oil of Turpentine	G	G	L	G	G	Sodium Silicate	G	G	G	G	G						

Series	Core	Cover
3630	PVC	PVC
3R30	Nylon-Lined	Polyurethane
3000	Nylon	Polyurethane
3130	Nylon-Lined(1)	Polyurethane
3160	Polyester	Polyurethane
3580	Polyester	Polyurethane
3730	Nylon-Lined	Polyurethane
3750	Polyester	Polyurethane
37NC	Polyester	Polyurethane
31NO	Nylon	Polyurethane
3350	Nylon-Lined	Polyurethane
3360	Nylon-Lined	Polyester

Series	Core	Cover
3440	Polyolefin	Polyurethane
3R80	Nylon	Polyurethane
3E80	Nylon	Polyurethane
3800	Nylon	Polyurethane
3840	Nylon	Polyurethane
3V10	Nylon-Lined	Polyurethane
3VEO	Nylon-Lined	Polyurethane
3420	Polyester	PVC
34BA	Polyester-Lined	PVC
31GW	Nylon	Polyurethane
34PW	Polyolefin	Polyurethane
3290	Polyolefin	Polyolefin

* Does not imply NSF or FDA complianace

† Recommended operating temperature not to exceed 150°F

** Does not imply AGA or UL complianace

▲ Recommended temperature not to exceed 100°F

(1)-2 size is a nylon, single-wall design

