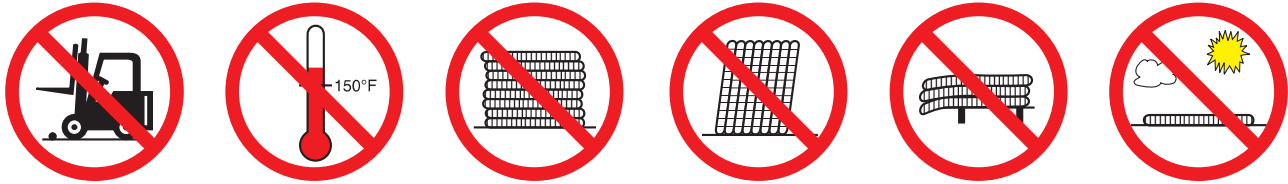


Care, maintenance and storage of Tigerflex® hose



Proper storage conditions and handling procedures can enhance and substantially extend the ultimate life of Tigerflex® hose.

Hose has limited life and the user must be alert to signs of impending failure. The service life of our hose is dependent upon the user's application. Since we have no control over the way in which the hose is used, we do not warrant our hose for any particular service life.

Tigerflex® hose should not be subjected to any form of abuse in storage or service.

Care should be taken to protect the hose from heavy load factors. Hose should be stored flat on smooth surfaces, and should not be stacked more than six coils high. Stacking hose higher than this could cause the compres-

sion load factor on the bottom coil to exceed the hose's design load limitations, causing the bottom coil to flatten out.

Hose should not be stored outdoors due to potential damage from the elements, which may shorten hose life.

Hose should not be stored in an upright manner, as this can cause the round coils to become egg shaped, and that stress can cause a deterioration of the hose.

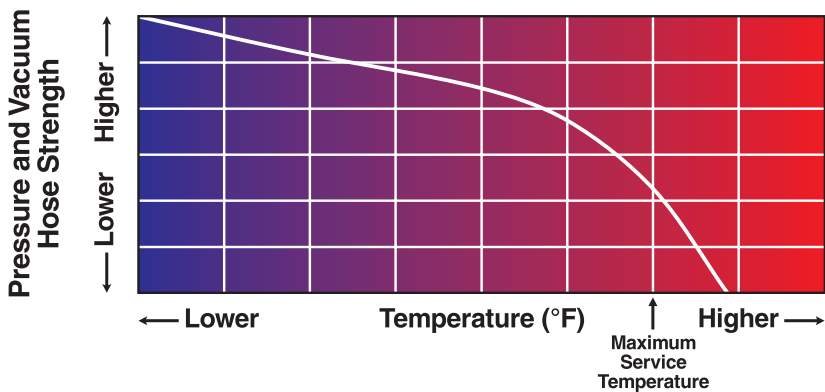
Hose should not be kinked or run over by any equipment. In the handling of larger ID hose, dollies should be used in transporting whenever possible. Slings or handling rigs, properly placed, should be used to support heavier hose, as there is no fabric or wire reinforcements in the hose to provide longitudinal support.

The Effect of Temperature on Working Pressure & Vacuum Ratings

As a general rule, the working pressure and vacuum ratings for plastic reinforced hoses are based on room temperature conditions. The maximum allowable working pressure or vacuum/suction for a hose decreases as the temperature increases and the material becomes softer and more elastic. Excessive bending of a hose while in service can also affect the allowable service application working pressure and vacuum.

Working pressure and vacuum ratings can be affected significantly by the type of fitting used, the method of attachment, and the temperature to which the hose assembly is exposed in service. The graph below demonstrates the overall trend.

Pressure and vacuum hose strength decreases as temperature increases



Working Pressure Ratings

Working pressure and vacuum ratings are given in this catalog at 68°F and 104°F. Between 104°F and the maximum service temperature, it must be noted that a rapid decline in the pressure or vacuum rating of the hose may occur, and all factors relating to the hose, fittings and service conditions must be taken into consideration.

No warranty is expressed or implied, as applications and methods of fitting installation may vary widely. Before placing a hose in service, the user **must** determine the suitability of the product under the correct working conditions, and assumes all risk and liability in connection therewith.

Chemical Resistance Guide

Many new materials have been developed to handle the wide range of modern chemicals being used in industry today. Many of these materials are now being used in the construction of *Tigerflex*[®] hose.

The Chemical Resistance Guide which appears on the following pages has been prepared to assist the user in the selection of the correct hose for the application.

These recommendations are based on laboratory and test reports which are, to the best of our knowledge, complete and accurate. However, the degree of chemical resistance of any given material depends upon many variables, including such factors as length of exposure, temperature, pressure, fluid velocity, and chemical concentration.

Therefore, no guarantee is expressed or implied by our publication of this Chemical Resistance Guide. If an element of doubt exists, we advise that a sample of the specific hose selected be obtained and tested under actual conditions.

Furthermore, listings in this Chemical Resistance Guide do not imply conformance to any U. S. Department of Agriculture (USDA), Food and Drug Administration (FDA) or any other federal, provincial or state laws which may be applicable when handling food products. For information on the conformance of any specific hose product with FDA, USDA, or 3-A Sanitary Standards, please refer to the notes accompanying the information and specifications for each hose featured in this catalog.

Warning

The Chemical Resistance Guide shown on the following pages is intended for general guidance only. The information contained therein is based upon tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No warranty is expressed or implied, as specific

application parameters, such as temperature, pressure and chemical concentrations vary widely. Furthermore, use of these hoses for handling multiple chemical products, either singly or as a mixture, may introduce uncontrollable factors relating to chemical resistance.

Before using any hose, the user is responsible for determining the suitability of the hose for the intended application. Therefore, the user assumes all risk and responsibility for determining the suitability of any hose for handling any chemical or chemicals.

The following materials are used in the construction of *Tigerflex*[®] hoses:

Flex Material	Tigerflex Hose	
Polyvinyl Chloride (PVC)	Series WT	Series WSTF
	Series WE	Series WST
	Series WBS	Series W
	Series MULCH	Series WG
	Series LK/LKC	Series CF
	Series GT/GTG	Series BW
	Series GTF	Series S
	Series CG/CG-SL	Series F/G
	Series WH	Series H/J/K
	Series FT	Series MH
	Series MILK/MILK-LT	Spa Hose

Flex Material	Tigerflex Hose	
Thermoplastic Polyurethane (TPU)	Series 2020	Urevac-3
	Series 2001	Series WU
	Ureflex-1	Series UVPE
	Ureflex-2	Urevac-1
	Series UBK	Series UVF
	Series PF	Series GC/GC-C
	Urevac-2	Series OV



Chemical Resistance Guide

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Acetaldehyde	U	U	U	U
Acetaldehyde 40 Pct.	—	—	—	—
Acetate Solvents-Crude	U	U	L	U
Acetate Solvents-Pure	U	U	L	U
Acetic Acid 0-10 Pct.	G	L	U	U
Acetic Acid 10-20 Pct.	G	L	U	U
Acetic Acid 20-30 Pct.	G	L	U	U
Acetic Acid 30-60 Pct.	G	L	U	U
Acetic Acid 80 Pct.	L	L	U	U
Acetic Acid Vapors	G	G	U	U
Acetic Acid-Glacial	L	U	U	U
Acetic Anhydride	U	U	U	U
Acetone	U	U	L	U
Acetylene	E	E	E	E
Acrylonitrile	E	G	—	—
Adipic Acid	G	L	U	U
Alcohol (See Type)	—	—	—	—
Allyl Alcohol 96 Pct.	U	U	U	U
Allyl Chloride	L	L	U	U
Alum	E	E	E	E
Aluminum Acetate	G	L	—	—
Aluminum Chloride	E	E	L	L
Aluminum Fluoride	E	E	E	E
Aluminum Hydroxide	E	L	G	L
Aluminum Nitrate	E	E	E	E
Aluminum Oxalate	—	—	—	—
Aluminum Oxychloride	E	E	—	—
Aluminum Sulfate	E	E	E	E
Ammonia – Aqueous	L	U	L	U
Ammonia – Dry Gas	L	U	L	U
Ammonia-Liquid	U	U	L	U
Ammoniated Latex	E	L	—	—
Ammonium Bicarbonate	—	—	—	—
Ammonium Carbonate	E	E	E	E
Ammonium Chloride	E	E	G	L
Ammonium Fluoride 25 Pct.	U	U	L	U
Ammonium Hydrosulphide	—	—	—	—
Ammonium Hydroxide 28 Pct.	G	G	L	U
Ammonium Metaphosphate	E	E	G	G
Ammonium Nitrate	E	E	G	G
Ammonium Persulfate	E	E	G	G
Ammonium Phosphate	—	—	—	—
(Ammoniacal)	—	—	—	—
Ammonium Phosphate-Neutral	E	E	G	G
Ammonium Sulfate	E	E	E	E
Ammonium Sulfide	E	E	E	E
Ammonium Thiocyanate	E	E	G	G
Amyl Acetate	U	U	U	U
Amyl Alcohol	L	U	U	U
Amyl Chloride	U	U	U	—
Aniline	L	U	U	U
Aniline Chlorohydrate	U	U	U	U
Aniline Hydrochloride	U	U	U	U
Aniline Sulphate	—	—	—	—
Animal Oils	E	G	—	—
Anthraquinone	E	E	—	—
Anthraquinonesulfonic Acid	E	E	U	U
Antimony Pentachloride	—	—	—	—
Antimony Trichloride	E	E	E	E
Apple (Sauce or Juice)	E	E	—	—
Aqua Regia	L	U	U	U
Aromatic Hydrocarbons	U	U	—	—
Arsenic Acid 80 Pct.	E	G	U	U
Arylsulfonic Acid	L	U	U	U
Asphalt	U	U	E	E
ASTM Fuel #1 Oil	G	L	E	E
ASTM Fuel #3 Oil	L	U	E	E
ASTM Fuel A	G	L	E	E
ASTM Fuel B	U	U	G	L
ASTM Fuel C	U	U	G	L
Baby Food	E	E	—	—
Barium Carbonate	E	E	E	E
Barium Chloride	E	E	E	E
Barium Hydroxide	E	E	G	L
Barium Sulfate	E	E	E	E
Barium Sulfide	E	E	E	E

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Barley	E	U	—	—
Beer	E	E	—	—
Beet-Sugar Liquor	E	E	—	—
Benzaldehyde	U	U	U	U
Benzene	U	U	L	U
Benzene-Sulfonic Acid 10 Pct.	E	E	U	U
Benzoic Acid	G	L	U	U
Benzol	U	U	L	U
Benzyl Alcohol	—	—	—	—
Berries	E	E	—	—
Bismuth Carbonate	E	E	E	E
Black Liquor (Paper industry)	E	E	—	—
Bleach-12.5 Pct. Active CL	G	L	L	U
Borax	E	G	E	E
Bordeaux Mixture	E	E	—	—
Boric Acid	E	E	U	U
Boron Trifluoride	E	E	E	E
Brine	E	E	G	U
Bromic Acid	E	L	U	U
Bromine-Liquid	U	U	U	U
Bromine-Water	U	U	U	U
Brussel Sprouts	E	E	—	—
Butadiene	L	U	—	—
Butane	E	E	E	E
Butanediol	—	—	—	—
Butanol-Primary	U	U	L	U
Butanol-Secondary	U	U	L	U
Butter	G	L	—	—
Butyl Acetate	U	U	L	U
Butyl Alcohol	E	L	L	U
Butyl Cellosolve	U	U	—	—
Butyl Phenol	L	U	—	—
Butylene	E	G	E	E
Butynediol (Erythritol)	U	U	U	U
Butyraldehyde	—	—	—	—
Butyric Acid 20 Pct.	L	U	L	U
Calcium Bisulfite	E	E	E	E
Calcium Carbonate	E	E	E	E
Calcium Chlorate	E	E	G	L
Calcium Chloride	E	E	L	U
Calcium Hydroxide	E	E	G	L
Calcium Hypochlorite	E	E	U	U
Calcium Nitrate	E	E	E	E
Calcium Phosphate	—	—	—	—
Calcium Sulfate	E	E	E	E
Camphor Oil	—	—	—	—
Cane Sugar Liquors	E	E	—	—
Carbon Bisulfide	U	U	—	—
Carbon Dioxide (Aqueous Solution)	E	E	E	E
Carbon Dioxide Gas (Wet)	E	E	E	E
Carbon Disulphide	U	U	—	—
Carbon Monoxide	U	E	E	E
Carbon Tetrachloride	U	U	L	U
Carbonic Acid	E	E	U	U
Carrots	E	E	—	—
Casein	E	G	E	E
Castor Oil	E	E	E	E
Catsup	E	G	—	—
Caustic Potash	E	E	L	U
Caustic Soda	E	E	L	U
Cellosolve	L	U	G	L
Cheese	E	G	—	—
Cherries	E	E	—	—
Chloracetic Acid	E	U	U	U
Chloral Hydrate	E	U	G	L
Chloric Acid 20 Pct.	E	E	U	U
Chlorinated Hydrocarbons	U	U	—	—
Chlorine Gas (Dry)	E	E	U	U
Chlorine Gas (Moist)	L	U	U	U
Chlorine Water 2 Pct.	L	U	L	U
Chlorine Water Saturated	—	—	—	—
Chlorobenzene	U	U	U	U
Chloroform	U	U	U	U
Chlorosulfonic Acid	L	U	U	U
Chocolate	G	L	—	—
Chrome Alum	E	E	E	E

Key: E — Excellent

G — Good

L — Limited

U — Unsatisfactory

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Chemical Resistance Guide

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Chromic Acid 10 Pct.	G	L	U	U
Chromic Acid 25 Pct.	G	L	U	U
Chromic Acid 30 Pct.	L	U	U	U
Chromic Acid 40 Pct.	L	U	U	U
Chromic Acid 50 Pct.	L	U	U	U
Chromic Acid Plating Solution	—	—	U	U
Cider	—	—	—	—
Citric Acid	E	E	U	U
Coal Tar	U	U	U	U
Coconut Oil	L	U	E	E
Cola Drinks	E	E	—	—
Copper Chloride	E	G	E	E
Copper Cyanide	E	E	—	—
Copper Fluoride 2 Pct.	E	E	E	E
Copper Nitrate	E	G	E	E
Copper Sulfate	E	G	E	E
Core Oils	E	E	E	E
Corn Oils	E	G	—	—
Cottonseed Oil	G	L	E	E
Creosote	U	U	—	—
Cresol	U	U	L	U
Cresylic Acid 50 Pct.	U	U	U	U
Crude Oil-Sour	E	E	E	E
Crude Oil-Sweet	E	E	E	E
Cyclohexane	L	U	—	—
Cyclohexanol	U	U	L	U
Cyclohexanone	U	U	U	U
Deminerlized Water	E	E	G	U
Detergents, Synthetic	E	G	—	—
Developers, Photographic	E	E	—	—
Dextrin	E	E	E	E
Dextrose	E	G	E	E
Di-acetone Alcohol	—	—	—	—
Di-isodecyl Phthalate	U	U	—	—
Diazo Salts	E	E	—	—
Dibutyl Phthalate	U	U	—	—
Dichlorobenzene	U	U	—	—
Diesel Oils	L	U	—	—
Diethyl Ether	—	—	—	—
Diethyl Ether	L	U	—	—
Diethylene Glycol	E	E	—	—
Diglycolic Acid	E	G	—	—
Dimethylamine	U	U	U	U
Diocyl Phthalate	U	U	—	—
Diethylphthalate	U	U	G	L
Disodium Phosphate	E	E	E	E
Distilled Water	E	E	G	U
Eggs (yolks or white)	E	E	—	—
Emulsifiers	E	E	—	—
Emulsions, Photographic	E	E	—	—
Ethers	U	U	G	L
Ethyl Acetate	U	U	L	U
Ethyl Acrylate	U	U	—	—
Ethyl Alcohol	G	L	—	—
Ethyl Alcohol 0-50 Pct.	G	L	G	L
Ethyl Alcohol 50-98 Pct.	L	U	L	U
Ethyl Butyrate	—	—	—	—
Ethyl Chloride	U	U	U	U
Ethyl Ether	U	U	G	L
Ethyl Formate	—	—	—	—
Ethylene Bromide	E	U	U	U
Ethylene Dichloride	U	U	U	U
Ethylene Glycol	E	E	G	L
Ethylene Oxide	U	U	U	U
Fatty Acids	E	G	G	L
Ferric Chloride	E	E	G	L
Ferric Nitrate	E	E	E	E
Ferric Sulfate	E	E	E	E
Ferrous Ammonium Citrate	—	—	—	—
Ferrous Chloride	E	E	E	E
Ferrous Sulfate	E	E	E	E
Figs	E	E	—	—
Fish Solubles	E	E	E	G
Fixing Solution Photographic	E	G	—	—
Flour	E	U	—	—
Fluorine Gas-Dry	U	U	U	U

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Fluorine Gas-Wet	U	U	U	U
Fluoroboric Acid	E	E	E	E
Fluorosilicic Acid	E	E	U	U
Fluorosilicic Acid 40 Pct.	—	—	—	—
Fluorosilicic Acid Concentrate	—	—	—	—
Food Products, such as Milk, Buttermilk, Molasses, Salad Oils, Fruit	E	E	—	—
Formic Acid	E	L	U	U
Formaldehyde 40 Pct. Aqueous	U	U	—	—
Formic Acid 10 Pct.	E	G	U	U
Formic Acid 100 Pct.	U	U	U	U
Formic Acid 25 Pct.	E	G	—	—
Formic Acid 3 Pct.	E	G	U	U
Formic Acid 50 Pct.	L	U	U	U
Freon-12	E	G	E	E
Fructose	E	E	E	E
Fruit Pulps and Juices	E	E	E	E
Fuel Oil	G	L	E	E
Furfural	U	U	U	U
Furfuryl Alcohol	E	L	—	—
Gallic Acid	E	E	—	—
Gas-Coke Oven	G	G	G	G
Gas-Manufactured	U	U	—	—
Gas-Natural (Dry)	E	E	E	E
Gas-Natural (Wet)	E	E	E	E
Gasoline	U	U	—	—
Gasoline - Refined	L	U	E	G
Gasoline - Sour	L	U	E	G
Gelatine	E	E	E	E
Gin	E	G	—	—
Ginger Ale	E	E	—	—
Glucose	E	E	E	E
Glycerine (Glycerol)	E	E	E	E
Glycol	E	E	G	G
Glycolic Acid 30 Pct.	E	E	U	U
Grade Sugar	—	—	—	—
Grape Juice	E	E	—	—
Grapfruit Juice	E	E	—	—
Grease	E	L	—	—
Green Liquor (Paper industry)	E	E	—	—
Heptachlor	E	L	—	—
Heptane	L	U	E	—
Hexadecanol	—	—	—	—
Hexane	L	U	—	—
Hexanol, Tertiary	L	U	G	—
Honey	E	E	—	—
Hydrochloric Acid 10 Pct.	E	E	U	U
Hydrochloric Acid 48 Pct.	E	L	U	U
Hydrocyanic Acid 10 Pct.	—	—	—	—
Hydrofluoric Acid 10 Pct.	G	L	U	U
Hydrofluoric Acid 4 Pct.	G	G	U	U
Hydrofluoric Acid 48 Pct.	G	U	U	U
Hydrofluoric Acid 60 Pct.	G	U	U	U
Hydrofluoroboric Acid	E	E	—	—
Hydrofluorosilicic Acid	G	L	U	U
Hydrogen	E	G	E	E
Hydrogen Bromide (Dry)	—	—	—	—
Hydrogen Chloride (Dry) (Liquid)	—	—	E	E
Hydrogen Cyanide	E	E	U	U
Hydrogen Peroxide 3 -12 Pct.	E	G	—	—
Hydrogen Peroxide 30 Pct.	E	G	G	L
Hydrogen Peroxide 50 Pct.	E	L	L	U
Hydrogen Peroxide 90 Pct.	U	U	U	U
Hydrogen Phosphide	E	L	—	—
Hydrogen Sulfide - Aqueous Solution	E	E	—	—
Hydrogen Sulfide - Dry	E	E	—	—
Hydrobromic Acid 20 Pct.	E	G	U	U
Hydroquinone	E	E	E	E
Hydroxylamine Sulfate	E	E	—	—
Hypochlorous Acid	E	E	L	U
Inks	—	—	—	—
Iodine (In Alcohol)	U	U	U	U
Iso-octane	G	L	—	—
Isopropyl Acetate	U	U	—	—
Isopropyl Alcohol	E	G	—	—
Jelly	E	E	—	—

KTFCFA0702

Key: E — Excellent

G — Good

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Chemical Resistance Guide

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Jet Fuels JP 3,4,5	U	U	G	L
Kerosene	U	U	E	G
Ketones	U	U	—	—
Kraft Liquor (Paper industry)	E	E	—	—
Lacquer Thinners	L	U	G	—
Lactic Acid 28 Pct.	E	E	U	U
Lard (marginal)	G	L	—	—
Lard Oil	E	G	E	G
Lauric Acid	E	E	L	U
Lauryl Chloride	E	E	E	G
Lauryl Sulfate	E	E	—	—
Lead Acetate	E	E	E	E
Lead Arsenate	—	—	—	—
Lead Nitrate	—	—	—	—
Lead Tetra-ethyl	—	—	—	—
Lemon Juice	E	G	—	—
Lime Sulfur	E	E	—	—
Linoleic Acid	E	E	L	U
Linseed Oil	E	E	E	E
Liquors (Chemical)	E	G	—	—
Lubricating Oils	U	U	E	E
Magnesium Carbonate	E	E	E	E
Magnesium Chloride	E	E	G	L
Magnesium Hydroxide	E	E	G	L
Magnesium Nitrate	E	E	E	E
Magnesium Sulfate	E	E	E	E
Maleic Acid 25 Pct. Aqueous	E	E	L	U
Maleic Acid 50 Pct.	—	—	—	—
Maleic Acid Concentrated	—	—	—	—
Malic Acid	E	E	L	U
Manganese Suphate	—	—	—	—
Mayonnaise	E	E	—	—
Mercuric Chloride	G	G	G	L
Mercuric Cyanide	G	G	—	—
Mercurous Nitrate	G	G	G	G
Mercury	G	G	—	—
Metallic Soaps	—	—	—	—
Methyl Acetate	U	U	—	—
Methyl Alcohol	L	U	L	U
Methyl Bromide	U	U	—	—
Methyl Chloride	U	U	U	U
Methyl Ethyl Ketone	U	U	L	U
Methyl Isobutyl Ketone	U	U	—	—
Methyl Sulfate	E	G	E	G
Methyl Sulfuric Acid	E	E	U	U
Methylated Spirit	—	—	—	—
Methylene Chloride	U	U	U	U
Milk	E	E	—	—
Mineral Oils	E	G	E	E
Mineral Spirits	—	—	—	—
Molasses	E	E	E	E
Monochlorobenzene	U	U	—	—
Naphtha	U	U	E	E
Naphthalene	L	U	—	—
Nickel Acetate	E	E	E	E
Nickel Chloride	E	E	E	E
Nickel Nitrate	E	E	E	E
Nickel Sulphate	E	E	E	E
Nicotine	E	E	E	E
Nicotine Acid	E	G	L	U
Nitric Acid (Anhydrous)	U	U	U	U
Nitric Acid 10 Pct.	E	G	U	U
Nitric Acid 25 Pct.	G	L	U	U
Nitric Acid 35 Pct.	G	L	U	U
Nitric Acid 40 Pct.	G	L	U	U
Nitric Acid 50 Pct.	—	—	—	—
Nitric Acid 60 Pct.	G	U	U	U
Nitric Acid 68 Pct.	L	U	U	U
Nitric Acid 70 Pct.	U	U	—	—
Nitrobenzene	U	U	U	U
Nitrous Oxide	E	E	E	E
Oats	E	U	—	—
Octyl Alcohol	—	—	—	—
Oils and Fats	E	G	E	E
Oils, Petroleum	E	G	E	E
Oleic Acid	G	L	U	U

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Oleum	U	U	U	U
Olives	E	E	—	—
Orange Juice	E	E	—	—
Oxalic Acid	E	E	U	U
Oxygen	E	E	E	E
Ozone	L	U	—	—
Palmitic Acid 10 Pct.	E	G	U	U
Palmitic Acid 70 Pct.	L	U	U	U
Paraffin	E	G	—	—
Peaches	E	E	—	—
Peanut Butter	E	G	—	—
Peas	E	E	—	—
Pentachlorophenol in Oil	G	L	—	—
Pentane	G	U	—	—
Peracetic Acid 40 Pct.	U	U	U	U
Perchloric Acid 10 Pct.	G	L	U	U
Perchloric Acid 70 Pct.	L	U	U	U
Perchloroethylene	U	U	—	—
Petrol	U	U	—	—
Petroleum Ether	L	L	—	—
Phenol	U	U	U	U
Phenylhydrazine	U	U	—	—
Phenylhydrazine Hydrochloride	L	U	—	—
Phosgene (Gas)	E	G	—	—
Phosgene (Liquid)	U	U	—	—
Phosphoric Acid — 0-25 Pct.	E	E	U	U
Phosphoric Acid — 25-50 Pct.	E	E	U	U
Phosphoric Acid — 50-90 Pct.	E	E	U	U
Phosphorus (Yellow)	G	L	—	—
Phosphorus Pentoxide	U	U	—	—
Phosphorus Trichloride	U	U	—	—
Photographic Chemicals	E	E	E	G
Photographic Developers	—	—	—	—
Photographic Emulsions	—	—	—	—
Photographic Fixers	—	—	—	—
Picric Acid	U	U	U	U
Pineapple Juice	E	E	—	—
Pitch	G	L	—	—
Plating Solutions	—	—	—	—
Brass	E	E	E	E
Cadmium	E	E	E	E
Chromium	G	G	G	G
Copper	E	E	E	E
Gold	E	E	E	E
Jodium	E	E	E	E
Lead	E	E	E	E
Nickel	E	E	E	E
Rhodium	E	E	E	E
Silver	E	E	E	E
Tin	E	E	E	E
Zinc	E	G	E	E
Potassium Acid Sulfate	E	E	E	E
Potassium Antimonate	E	E	E	E
Potassium Bicarbonate	E	E	E	E
Potassium Bichromate	E	E	E	E
Potassium Bisulfite	E	E	E	E
Potassium Bisulphate	—	—	—	—
Potassium Borate 1 Pct.	E	E	E	E
Potassium Bromate 10 Pct.	E	E	E	E
Potassium Bromide	E	E	E	E
Potassium Carbonate	E	E	E	E
Potassium Chlorate	E	E	G	G
Potassium Chloride	E	E	E	G
Potassium Chromate 40 Pct.	E	E	G	G
Potassium Cuprocyanide	E	E	—	—
Potassium Cyanide	E	E	E	E
Potassium Dichromate 40 Pct.	E	E	G	G
Potassium Ferricyanide	E	E	E	E
Potassium Fluoride	E	E	E	G
Potassium Hydroxide 10 Pct.	E	E	L	U
Potassium Hydroxide 20 Pct.	E	E	U	U
Potassium Hydroxide 35 Pct.	E	E	U	U
Potassium Hydroxide Conc.	—	—	—	—
Potassium Hypochlorite	G	L	U	U
Potassium Nitrate	E	E	E	E
Potassium Perborate	E	E	E	E

Key: E — Excellent

G — Good

L — Limited

U — Unsatisfactory

KTFC A0702

Chemical Resistance Guide

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Potassium Perchlorate	E	E	G	L
Potassium Permanganate 10 Pct.	G	G	G	L
Potassium Persulfate	E	E	E	E
Potassium Phosphate	—	—	—	—
Potassium Sulfate	E	E	E	E
Potassium Sulfide	E	E	E	E
Potassium Thiocyanate	E	E	E	E
Potatoes	E	E	—	—
Propane	E	E	E	E
Propargyl Alcohol	E	E	—	—
Propyl Alcohol	E	L	G	L
Propylene Dichloride	U	U	U	U
Propylene Glycol	U	U	U	U
Prune Juice	E	E	—	—
Raisins	E	E	—	—
Ritchfield "A" Weed Killer	E	L	—	—
Salicylic Acid	—	—	—	—
Salt Water	E	E	G	U
Selenic Acid	E	G	U	U
Shortening	G	L	—	—
Silicic Acid	E	E	U	U
Silicone Fluids	—	—	—	—
Silver Cyanide	E	E	E	E
Silver Nitrate	E	E	E	E
Silver Plating Solutions	E	G	E	E
Soap Solution	E	E	G	U
Soda	E	E	—	—
Sodium Acetate	E	E	E	E
Sodium Acid Sulfate	E	E	E	E
Sodium Aluminate	—	—	—	—
Sodium Antimonate	E	E	E	E
Sodium Arsenite	E	E	E	E
Sodium Benzoate	E	G	E	E
Sodium Bicarbonate	E	E	E	E
Sodium Bisulfate	E	E	E	E
Sodium Bisulfite	E	E	E	E
Sodium Bromide	E	E	E	G
Sodium Carbonate (Soda Ash)	E	E	E	E
Sodium Chlorate	G	L	G	G
Sodium Chloride	E	E	E	G
Sodium Cyanide	E	E	E	E
Sodium Dichromate	E	G	E	G
Sodium Ferricyanide	E	E	E	E
Sodium Ferrocyanide	E	E	E	E
Sodium Fluoride	E	E	E	G
Sodium Hydroxide 10 Pct.	E	E	L	U
Sodium Hydroxide 35 Pct.	E	G	U	U
Sodium Hydroxide 50 Pct.	E	L	—	—
Sodium Hydroxide Saturated	E	E	U	U
Sodium Hypochlorite	E	E	U	U
Sodium Nitrate	E	E	E	E
Sodium Nitrite	E	E	E	E
Sodium Phosphate-Acid	G	G	U	U
Sodium Silicate	E	E	E	E
Sodium Sulfate	E	E	E	E
Sodium Sulfide	E	E	E	E
Sodium Sulfite	E	E	E	E
Sodium Thiosulfate (Hypo)	E	E	E	G
Soya Beans	E	U	—	—
Soya Oil	E	G	—	—
Soybean Oil	E	E	—	—
Spinach	E	E	—	—
Squash	E	E	—	—
Stannic Chloride	E	E	E	G
Stannous Chloride	E	G	E	G
Starch	—	—	—	—
Stearic Acid	E	G	L	U
Stoddard Solvent	L	U	G	G
Styrene	U	U	—	—
Sucrose	—	—	—	—
Sugar (All Forms)	E	E	—	—
Sulfur	G	G	—	—
Sulfuric Acid 0-10 Pct.	E	G	L	U
Sulfuric Acid 10-40 Pct.	E	G	U	U
Sulfuric Acid 50-60 Pct.	E	G	U	U
Sulfuric Acid 70 Pct.	E	G	U	U

Material Handled	Hose Materials of Construction and Temperatures			
	PVC		Thermoplastic Polyurethane	
	68°F	104°F	68°F	104°F
Sulfuric Acid 95 Pct.	U	U	U	U
Sulfuric Acid 95 Pct. to Fuming	L	L	U	U
Sulfurous Acid	G	L	U	U
Sulphur Dioxide Gas-Dry	E	—	—	—
Sulphur Dioxide Gas-Wet	U	U	—	—
Sulphur Dioxide-Liquid	L	U	—	—
Sulphur Trioxide	E	G	—	—
Sulphurous Acid 10 Pct.	—	—	—	—
Sulphurous Acid 30 Pct.	—	—	—	—
Tall Oil	U	U	—	—
Tallow	—	—	—	—
Tannic Acid	E	E	L	U
Tanning Extracts	—	—	—	—
Tanning Liquors	E	E	—	—
Tartaric Acid	E	G	L	U
Tea (Brewed)	E	E	—	—
Tetraethyl Lead	G	L	G	G
Tetrahydrofurane	U	U	U	U
Tetrahydronaphthalene	—	—	—	—
Thionyl Chloride	U	U	U	U
Tin Chloride	E	E	E	E
Titanium Tetrachloride	E	U	L	U
Titanium Trichloride	—	—	—	—
Toluol or Toluene	U	U	L	U
Tomato Juice	E	E	—	—
Tomato Puree & Paste	E	E	—	—
Tomatoes	E	E	—	—
Transformer Oil	—	—	—	—
Tributyl Phosphate	U	U	—	—
Trichlorobenzene	—	—	—	—
Trichloroethylene	U	U	L	U
Tricresyl Phosphate	U	U	U	U
Triethanolamine	L	U	—	—
Triethylamine	G	L	—	—
Trimethyl Propane	L	U	—	—
Trisodium Phosphate	E	E	E	E
Turpentine	L	U	E	G
Urea	E	G	E	E
Urine	E	E	E	E
Vanilla Extract	—	—	—	—
Varnish	U	U	E	G
Vegetable Oils	G	L	—	—
Vinegar	E	G	G	L
Vinyl Acetate	U	U	U	U
Vinyl Chloride	U	U	—	—
Vodka	E	G	—	—
Water-Acid Mine Water	E	E	G	U
Water-Distilled	E	E	G	U
Water-Fresh	E	E	G	U
Water-Salt	E	E	G	U
Wetting Agents	—	—	—	—
Whey	—	—	—	—
Whiskey	E	G	—	—
White Gasoline	E	E	E	G
White Liquor (Paper industry)	E	E	—	—
Wines	E	G	—	—
Xylene or Xylol	U	U	G	L
Yeast	E	U	—	—
Yogurt	E	G	—	—
Zinc Chloride	E	E	E	E
Zinc Chromate	E	E	E	E
Zinc Cyanide	E	E	E	E
Zinc Nitrate	E	E	E	E
Zinc Sulfate	E	E	E	E
Mixtures of Acids:				
Nitric 15 Pct., Hydrofluoric 4 Pct.	E	G	U	U
Sodium Dichromate 13 Pct., Nitric Acid 16 Pct., Water 71 Pct.	E	G	U	U

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Key: E — Excellent

G — Good

L — Limited

U — Unsatisfactory



Cautionary Statement

All Products are in the nature of commodities and they are sold by published specifications and not for particular purposes, uses or applications. Purchaser shall first determine their suitability for the intended purposes, uses or applications and shall either conduct its own engineering studies or tests, or retain qualified engineers, consultants or testing laboratories and consult with them before determining the proper use, suitability or propriety of the merchandise or Products for the intended purposes, uses or applications.

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