

Application Data

Important Safety Information

Read this page before using any of the infor- mation in this catalog.

This catalog is designed to be used as a guide in selecting the proper hose for the applications listed herein. It contains many cautions, warnings, guidelines, and directions for the safe and proper use of Boston hose. All these directions and footnotes should be read and understood before specifying or using any of these hoses.

Throughout this catalog, potentially harmful situations are highlighted with the following symbols.



This symbol is used to indicate imminently hazardous situations which, if not avoided, will result in serious injury or death.



This symbol is used to indicate potentially hazardous situations which, if not avoided, could result in serious injury or death.



This symbol is used to indicate potentially hazardous situations which, if not avoided, may result in property or equipment damage.

Some of the most common problems in the chemical hose industry result from improper hose and coupling

selection, improper assembly techniques, failure to correctly inspect and test hose assemblies, and improper cleaning practices and hose assembly storage techniques.

In turn, these situations can lead to material leakage, spraying, spattering, end blow-offs, explosions, and other situations that may result in serious personal injury and property damage.

Personal injuries caused by improper hose assembly specification, installation, and usage could include cuts and abrasions, serious burns, irreparable eye damage, or even death.

Therefore, for your safety and the safety of others working around you, Eaton strongly urges you to read and comply with all safety information printed in this publication.



WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, and damage to property.



WARNING: Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

Consult the coupling manufacturer to make sure you choose the correct coupling and proper assembly for the application, or contact Eaton Technical Support.

Before using any hoses in this catalog, consult the safety section in this catalog, and Chemical Compatibility Chart on page 21 or Boston Hose Chemical Resistance Guidelines. If you do not have the most recent copy, contact Eaton Customer Support at 1-888-258-0222.

Selection of Hose

Selection of the proper Boston hose for an application is essential to the proper operation and safe use of the hose and related equipment. Inappropriate hose selection may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying

fluids or flying projectiles. To avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog. Some of the factors to consider in proper hose selection are:

- hose size
- hose length
- hose ends
- fluid conveyed
- bends
- temperature
- hose pressure
- static head pressure
- installation design

These factors and the supplemental information contained in this catalog should be considered in selecting the proper hose for your application. If you have any questions regarding the proper hose for your application, please contact Eaton at 1-888-258-0222.

Application Data

Important Safety Information

Proper Selection of Hose Ends

Selection of the proper Boston hose end or coupling is essential to the proper operation and safe use of hose assemblies and related equipment. Inadequate attention to the selection of the end fittings may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of an incompatible hose end or coupling, you should carefully review the information in this catalog. Some of the factors which are involved in the selection of the proper hose couplings are:

- fluid compatibility
- temperature
- installation design
- hose size
- corrosion requirements
- fluid conveyed

The given hose and hose end selection factors and the other information contained in this catalog should be considered by you in selecting the proper hose end fitting for your application.

If you have any questions regarding the use of hose/hose ends, please contact Eaton Technical Support at 1-888-258-0222.

Hose Installation

Proper installation is essential to the proper operation and safe use of the hose assembly and related equipment.

Improper hose assembly installation may result in serious injury or property damage caused by spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from improper hose assembly installation carefully review the information in this catalog. Some of the factors to be considered when installing a hose assembly are:

- hose elongation or contraction
- proper bend radius/hose routing under pressure
- elbows and adapters to relieve strain
- protection from rubbing or abrasion high temperature sources
- protection against excessive movement
- twisting from pressure spikes/surges

These hose assembly installation factors and the other information in this catalog should be considered by you before installing the hose assembly. If you have any questions regarding proper hose installation, please contact Eaton Technical Support at 1-888-258-0222.

Hose Maintenance

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% or more, the hose should be repaired or removed from service. Inadequate attention to hose maintenance may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

Coll-O-Crimp Hose, Hose Ends and Assembly Equipment Compatibility

The Coll-O-Crimp Equipment Package, Coll-O-Crimp Hose Ends and Coll-O-Crimp Hose have been engineered and designed as a complete hose assembly system. Each component of the Coll-O-Crimp hose assembly system is compatible with other Coll-O-Crimp components to which it relates. Component compatibility, along with the use of quality components, insures the production of reliable hose assemblies when assembled properly. The use or intermixing of fittings and hose not specifically engineered and designed for use with each other and Coll-O-Crimp equipment is not recommended and may result in the production of unsafe or unreliable hose assemblies. This can result in hose assembly leakage, hose separation or other failures which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

Application Data

Chemical Compatibility Chart

These tables alphabetically list commonly used materials of various chemical composition. After each fluid listing you will find the basic hose tube and fitting materials rated according to their chemical resistance to each individual fluid. All ratings are at 70°F. The chart is intended to be used as a guide only. Consult Eaton Technical Support at 1-888-258-0222 for further information.

WARNING – Selection of Hose: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related

equipment. Inadequate attention to selection of the hose for your application can result in serious bodily injury or property damage from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

WARNING – Proper Selection of Hose Fittings: Selection of the proper fittings for the hose and application is essential to the proper operation and safe use of the hose and

related equipment. Inadequate attention to the selection of the fittings for your application can result in serious bodily injury or property damage resulting from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of the wrong fitting, you should carefully review the information in this catalog.

WARNING – The following list of chemicals is offered as a guide to the chemical resistance properties of the tube material of the hoses shown. It should

be used as a guide only, as the degree of resistance of any elastomer to a particular fluid depends upon such variables as temperature, concentration, pressure conditions, velocity of flow, duration of exposure, aeration, stability of the fluid, etc.

Therefore, when in doubt, it is advisable not to use the hose. If this is not practical, tests should be devised that simulate actual service conditions as nearly as possible. Eaton offers additional technical assistance.

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Acetaldehyde	G	G	X	X	X	X	G	G	F	G	F	X	X	X	—	X	X	G
Acetic Acid (Concentrated)	G	G	X	X	X	X	G	G	X	G	X	X	X	X	G	X	X	G
Acetic Acid (Dilute)	G	G	F	X	X	F	G	G	X	G	F	X	G	X	G	X	X	G
Acetic Anhydride	G	G	X	G	G	X	G	G	X	G	F	X	X	X	G	X	F	F
Acetone	G	G	X	X	X	X	G	G	F	G	F	X	F	X	G	G	G	G
Acrylonitrile	G	G	G	X	X	X	G	G	—	X	X	X	—	X	G	—	G	G
Air	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Alcohols:																		
Amyl Alc.	G	G	X	G	G	F	G	G	G	G	G	G	G	X	G	G	F	F
Butyl Alc., Butanol	G	G	X	G	G	G	G	G	G	G	G	G	—	X	G	G	G	G
Ethyl Alc., Ethanol	G	G	F	G	G	G	G	G	G	G	G	G	G	X	G	G	F	G
Isopropyl Alcohol, Isopropanol	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G
Methyl Alcohol, Methanol	G	G	X	G	G	G	G	G	G	G	G	G	G	X	G	G	F	G
Aluminum Chloride	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	X	X	F
Aluminum Fluoride	G	G	G	G	G	F	G	G	X	G	G	G	—	G	X	X	X	X
Aluminum Hydroxide	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	X	F	G

G - Good

F - Fair

X - Not Recommended

— - Insufficient Information

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Aluminum Nitrate	G	G	G	G	G	G	G	G	F	G	G	G	—	X	—	X	X	G
Aluminum Sulfate	G	G	G	G	G	G	G	G	F	G	G	G	G	G	G	X	X	G
Alums	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	X	X	F
Ammonia, Anhydrous	—	—	—	—	—	—	G	—	—	—	—	—	—	—	—	X	F	G
Ammonia Solution (10%)	G	G	G	G	G	F	G	G	X	G	G	F	X	X	X	X	G	G
Ammonium Chloride	G	G	G	G	G	G	G	G	X	G	G	G	G	F	G	X	G	F
Ammonium Hydroxide	G	G	X	F	F	F	G	G	X	G	G	F	X	X	G	X	F	G
Ammonium Nitrate	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	—	—	G
Ammonium Phosphate	G	G	F	G	G	G	G	G	G	G	G	G	G	F	G	X	X	G
Ammonium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	F
Amyl Acetate	G	G	X	X	X	X	G	G	G	F	X	X	F	X	X	G	F	G
Amyl Alcohol	G	G	X	G	G	F	G	G	G	G	G	G	G	X	G	G	F	F
Aniline	G	G	X	X	X	X	G	G	X	X	X	X	X	X	X	X	G	G
Aniline Dyes	G	G	X	F	F	F	G	G	X	G	F	F	X	X	X	X	X	F
Animal Oils and Fats	G	G	G	G	G	X	G	G	—	F	F	X	G	X	F	G	G	G
Anti—Freeze (Glycol Base)	G	G	G	G	G	G	G	G	—	G	G	G	G	X	G	G	G	G
Aqua Regia	X	X	X	X	X	X	G	F	X	X	X	X	X	X	X	—	X	X
Aromatic Hydrocarbons	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G
Asphalt Emulsion	X	X	X	G	X	X	G	G	—	X	X	X	G	X	F	G	G	G
Barium Chloride	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	X	F	G
Barium Hydroxide	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	X	G	G
Barium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	X	G	X	G	G	G
Barium Sulfide	G	G	G	G	G	G	G	G	—	G	G	G	X	G	G	X	X	G
Beet Sugar Liquors	G	G	G	G	G	G	G	G	G	X	G	G	—	X	G	X	G	G
Benzaldehyde	G	G	X	X	X	X	G	G	G	F	X	X	X	X	X	F	F	G
Benzene, Benzol	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	F	G	G	G
Benzoic Acid	G	G	X	X	X	G	G	G	X	X	X	X	X	X	G	F	X	F
Black Sulfate Liquor	G	F	X	F	F	G	G	G	X	G	F	X	G	X	X	X	G	G

G - Good

F - Fair

X - Not Recommended

— - Insufficient Information

*For Intermittent Transfer Only

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Bleach Solution	F	F	F	X	X	X	G	G	X	G	F	X	F	F	G	X	X	G
Borax Solution	G	G	G	F	F	G	G	G	—	G	G	G	G	G	G	G	G	G
Boric Acid	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	X	G
Brake Fluid (Glycol Ether Base)	G	G	X	X	X	F	G	G	—	G	X	X	—	X	G	G	G	G
Brine	G	G	G	G	G	G	G	G	—	G	G	G	G	X	G	—	X	F
Bromine	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X	X	X	X
Butyl Acetate	G	G	X	X	X	X	G	G	—	F	X	X	F	X	F	G	G	G
Butyl Alcohol, Butanol	G	G	X	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G
Calcium Bisulfite	G	G	G	G	G	G	G	G	X	G	G	G	X	G	X	X	X	X
Calcium Chloride	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	X	F	F
Calcium Hydroxide	G	G	G	F	F	G	G	G	G	G	F	G	G	X	G	F	G	G
Calcium Hypochlorite	G	G	G	F	F	F	G	G	X	G	F	X	F	X	G	F	X	F
Cane Sugar Liquors	G	G	G	G	G	G	G	G	—	G	G	G	G	X	G	F	G	G
Carbon Dioxide (Dry)	G	G	G	G	G	G	G	G	G	G	G	F	G	G	G	G	G	G
Carbon Dioxide (Wet)	G	G	G	G	G	G	G	G	G	G	G	F	—	G	—	F	G	G
Carbon Disulfide (Bisulfide)	F	X	X	X	X	X	G	G	X	X	X	X	X	G	X	G	G	G
Carbon Monoxide (Hot)	—	—	X	F	F	F	G	G	X	F	G	X	G	F	G	X	F	G
Carbon Tetrachloride	G*	G*	X	X	X	X	G	G	G	X	X	X	F	X	X	G	G	G
Carbonic Acid	G	G	G	G	G	G	G	G	—	G	G	G	X	G	X	X	X	F
Castor Oil	G	G	G	G	G	F	G	G	—	F	G	X	F	F	G	G	G	G
Cellosolve Acetate	G	G	X	X	X	X	G	G	—	F	F	X	X	X	X	X	X	G
Chlorinated Solvents	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	F
Chloroacetic Acid	G	G	X	X	X	X	G	G	X	F	X	X	X	X	X	X	X	F
Chlorobenzene	G*	G*	X	X	X	X	G	G	X	X	X	X	X	X	—	F	F	G
Chlorine Gas (Dry)	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X	F	F	G
Chlorine Gas (Wet)	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X	X	X	X
Chloroform	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G
Chlorosulfonic Acid	F*	F*	X	X	X	X	G	G	X	X	X	X	X	X	X	X	F	X

G - Good

F - Fair

X - Not Recommended

— - Insufficient Information

*For Intermittent Transfer Only

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Chromic Acid (under 25%)	G	X	F	X	X	X	G	G	X	G	G	X	X	X	X	X	X	G
Chromic Acid (25-40%)	G	X	X	X	X	X	G	G	X	G	G	X	X	X	X	X	X	F
Citric Acid	G	G	G	F	F	G	G	G	F	G	G	G	G	X	X	X	X	G
Coke Oven Gas	X	X	X	X	X	X	G	G	—	X	X	X	—	X	X	F	G	G
Copper Chloride	G	G	G	G	G	F	G	G	X	G	G	G	G	G	X	X	X	G
Copper Cyanide	G	G	G	G	G	F	G	G	G	G	G	G	—	G	—	X	X	G
Copper Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	G
Corn Syrup (Non-food)	G	G	G	G	G	F	G	G	—	G	F	F	G	G	—	—	G	G
Cottonseed Oil	G	G	F	G	G	X	G	G	—	F	F	X	G	G	G	G	G	G
Creosote	G	G	X	F	F	X	G	G	X	X	F	X	X	F	F	F	—	G
Cresol	G	G	X	X	X	X	G	G	X	X	X	X	X	X	G	—	G	G
Cyclohexanol	G	G	X	F	F	F	G	G	G	G	G	F	—	—	G	G	F	G
Dextrose (Food Grade)	G	X	X	X	X	X	G	G	X	X	X	X	X	X	X	—	—	G
Dichlorobenzene	G*	G*	X	X	X	X	G	G	—	X	X	X	X	X	X	—	—	G
Diesel Fuel	G	G	X	G	G	X	G	G	—	X	F	X	F	F	G	G	G	G
Diethanolamine	G	G	X	F	X	X	G	G	—	G	X	F	X	X	—	X	G	G
Diethylene-triamine	G	G	X	F	X	X	G	G	X	G	X	F	—	X	—	—	—	—
Dowtherm A	—	—	X	X	X	X	G	G	X	X	X	X	X	—	X	X	F	G
Enamel (Solvent Base)	G	G	X	F	F	X	G	G	—	X	X	X	G	—	G	G	—	G
Ethanolamine	G	G	X	F	F	X	G	G	—	G	X	G	—	X	—	X	G	G
Ethers (Ethyl Ether)	G	G	X	X	X	X	G	G	—	X	X	X	X	X	G	G	G	G
Ethyl Alcohol	G	G	F	G	G	G	G	G	G	G	G	G	G	G	G	F	G	G
Ethyl Acetate	G	G	X	X	X	X	G	G	G	G	X	X	F	X	F	G	G	G
Ethyl Acrylate	G	G	X	X	X	X	G	G	—	F	X	X	—	X	F	—	G	G
Ethyl Methacrylate	G	G	X	X	X	X	G	G	—	F	X	X	—	X	F	—	G	G
Ethylamine	G	G	X	X	X	X	G	G	X	F	X	X	—	X	—	G	—	G
Ethyl Cellulose	G	G	X	F	F	F	G	G	—	F	F	G	—	F	G	F	G	F
Ethyl Chloride	G*	G*	X	X	X	X	G	G	—	X	X	X	X	F	X	F	F	G
Ethylene-diamine	G	G	X	F	X	G	G	G	X	G	F	G	—	X	—	G	G	G
Ethylene Dibromide	G	G	X	X	X	X	G	G	—	X	X	X	—	X	—	—	—	—

G - Good

F - Fair

X - Not Recommended

— - Insufficient Information

*For Intermittent Transfer Only

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Ethylene Dichloride	G*	G*	X	X	X	X	G	G	—	X	X	X	X	X	X	G	X	X
Ethylene Glycol	G	G	G	G	G	G	G	G	G	G	G	G	G	F	G	F	G	G
Ethylene Oxide	G	G	X	X	X	X	G	G	—	X	X	X	G	X	X	X	F	F
Fatty Acids	G	G	G	F	F	X	G	G	G	F	X	X	G	—	F	F	F	G
Ferric Chloride 5%	G	G	G	G	G	G	G	G	G	G	G	G	—	F	G	X	X	X
Ferric Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	—	G	X	X	F
Fertilizer Salts Solution	G	G	G	F	F	F	G	G	—	G	G	G	—	—	—	—	—	G
Formaldehyde	G	G	X	F	F	F	G	G	G	G	X	F	F	X	G	F	X	G
Formic Acid	G	G	X	F	F	F	G	G	X	G	X	X	X	X	G	F	X	G
Freon 12**	—	—	—	—	—	—	G	—	—	—	—	—	—	—	—	G	G	G
Freon 134a**	—	—	—	—	—	—	G	—	—	—	—	—	—	—	—	—	G	G
Fuel Oil	G	G	F	G	G	F	G	G	—	X	X	X	—	F	G	F	G	G
Furfural	G	G	X	X	X	X	G	G	X	F	F	X	—	—	F	F	G	G
Gasoline (Refined)	G	G	X	F	F	X	G	G	G	X	X	X	G	F	G	G	G	G
Gasoline (Unleaded)	G	G	X	G	G	X	G	G	G	X	F	X	X	X	G	G	G	G
Gasoline (10% Ethanol)	G	G	X	G	G	X	G	G	G	X	X	X	X	X	—	G	G	G
Gasoline (10% Methanol)	G	G	X	F	F	X	G	G	G	X	X	X	X	X	—	G	G	G
Glucose (Non-food)	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Glycerine, Glycerol (Non-food)	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G
Greases	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	G	G	G
Green Sulfate Liquor	G	G	G	F	F	F	G	G	X	G	G	G	X	G	X	X	X	G
Heptane	G	G	X	G	G	F	G	G	G	X	F	X	G	F	G	G	G	G
Hexane	G	G	X	G	G	F	G	G	G	X	F	X	G	F	G	G	G	G
Houghto Safe 273 to 640	G	G	F	G	G	G	G	G	—	G	—	F	—	X	G	G	G	G
Houghto Safe 5046, 5047F	G	G	G	G	G	G	G	G	—	X	X	X	G	X	G	G	G	G
Houghto Safe 1000 Series	G	G	X	X	X	X	G	G	—	G	X	X	—	X	—	G	G	G
Hydraulic Oils:																		
Straight Petroleum Base	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	G	G	G
Water Petroleum Emulsion	G	G	—	G	G	F	G	G	—	X	F	X	G	X	G	G	G	G
Water Glycol	G	G	X	G	G	G	G	G	G	G	X	F	X	X	G	G	G	G

G - Good

F - Fair

X - Not Recommended

— - Insufficient Information

*For Intermittent Transfer Only

**Use Approved Freon Hose

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Hydraulic Oils:																		
Straight Phosphate Ester	G	G	X	X	X	X	G	G	G	G	X	X	—	X	G	G	G	G
Phos. Ester/ Petroleum Blend	G	G	X	X	X	X	G	G	G	X	X	X	—	X	G	G	G	G
Polyol Ester	G	G	—	G	G	X	G	G	—	X	—	X	—	G	G	G	G	G
Hydrobromic Acid (under 48%)	G	G	G	X	X	X	G	G	X	G	G	X	X	X	G	X	X	X
Hydrochloric Acid	G	G	G	X	X	X	G	G	X	G	G	X	X	X	G	X	X	X
Hydrocyanic Acid	G	G	G	F	F	X	G	G	X	F	G	X	X	—	X	X	F	G
Hydrofluoric Acid (under 50%)	G	G	F	X	X	X	G	G	X	F	G	X	X	X	X	X	X	G
Hydrofluoric Acid (over 50%)	G	G	X	X	X	X	G	G	X	X	G	X	X	X	X	X	X	G
Hydrofluosilicic Acid	G	G	G	F	F	X	G	G	X	G	G	X	—	—	G	X	X	X
Hydrogen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	G
Hydrogen Peroxide	F	F	—	X	X	X	G	G	X	F	X	X	—	—	G	X	X	G
Hydrogen Sulfide	G	G	G	X	X	X	G	G	X	X	F	X	G	—	X	F	F	F
Hydrolube	G	G	G	G	G	F	G	G	—	G	—	—	F	X	—	G	G	G
Iodine	F	F	X	F	X	X	G	G	X	G	G	X	—	X	G	X	X	X
Isocyanates	G	X	X	X	X	X	G	—	X	X	X	X	X	X	X	—	—	—
Isopropyl Alcohol, Isopropanol	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G
Isopropylamine	G	G	X	X	X	F	G	G	—	F	X	F	—	—	—	G	—	G
Iso-Octane	G	G	X	G	G	F	G	G	G	X	F	X	G	X	G	G	G	G
Jet Fuel (Transfer Only)	G	G	X	G	G	F	G	G	G	X	X	X	G	F	G	G	F	G
Kerosene	G	G	X	G	G	F	G	G	G	X	F	X	F	G	G	G	G	G
Lacquer	G	G	X	X	X	X	G	G	G	X	X	X	X	X	F	G	X	G
Lacquer Solvents	G	G	X	X	X	X	G	G	G	X	X	X	F	X	F	G	X	G
Lactic Acid	G	G	G	X	X	G	G	G	G	F	G	X	X	X	X	F	F	G
Lime Sulfur	G	G	G	X	X	G	G	G	F	G	F	F	—	—	—	X	—	G
Lindol	G	G	—	X	X	X	G	G	G	G	X	X	—	X	—	F	G	G
Linseed Oil	G	G	G	G	G	X	G	G	G	X	F	X	F	F	G	F	G	G
Lubricating Oils	G	G	G	G	G	F	G	G	G	X	F	X	G	F	G	G	G	G
Lye	G	G	G	F	F	G	G	G	F	G	G	G	—	X	F	F	X	G
Magnesium Chloride	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	F	F	G
Magnesium Hydroxide	G	G	G	F	F	G	G	G	G	G	F	G	—	X	G	G	G	G

G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Magnesium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	—	G	F	G	G
Mercuric Chloride	G	G	F	F	F	G	G	G	X	G	G	F	—	—	X	X	X	X
Mercury	G	G	F	G	G	G	G	G	G	G	G	F	G	G	G	X	G	G
Methyl Alc., Methanol	G	G	X	G	G	G	G	G	G	G	G	G	G	F	G	F	G	G
Methyl Acrylate	G	G	X	X	X	X	G	G	X	F	X	X	—	X	X	G	G	G
Methyl Bromide	X	X	X	X	X	X	G	G	F	X	X	X	X	X	X	G	G	G
Methyl Chloride	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	F	G	G	G
Methylene Chloride	G*	G*	X	X	X	X	G	G	F	X	X	X	X	X	X	G	G	G
Methyl-t-Butyl Ether (MTBE)	G	G	X	F	F	X	G	G	G	X	X	X	—	—	G	—	G	G
Methyl Ethyl Ketone	G	G	X	X	X	X	G	G	G	F	X	X	G	X	X	G	G	G
Methyl Iso-butyl Ketone	G	G	X	X	X	X	G	G	G	F	X	X	—	X	X	G	G	G
Methyl Iso-propyl Ketone	G	G	X	X	X	X	G	G	G	F	X	X	—	X	X	G	G	G
Methyl Methacrylate	G	G	X	X	X	X	G	G	—	X	X	X	—	X	X	—	G	G
Mineral Oil	G	G	F	G	G	F	G	G	G	X	F	X	G	G	G	G	G	G
Mineral Spirits	G	G	X	G	G	F	G	G	G	X	X	X	G	F	G	G	G	G
Naphtha	G	G	X	F	F	F	G	G	G	X	X	X	G	F	G	F	G	G
Napthalene	G	G	X	X	X	X	G	G	G	X	X	X	F	F	G	F	G	G
Nickel Acetate	G	G	G	X	X	G	G	G	G	G	G	G	—	X	—	G	G	G
Nickel Chloride	G	G	G	G	G	F	G	G	G	G	G	G	X	X	G	X	X	F
Nickel Sulfate	G	G	G	G	G	F	G	G	G	G	G	G	—	F	G	X	X	G
Nitric Acid (under 35%)	G	F*	G	X	X	X	G	G	X	F	F	X	X	X	X	X	X	G
Nitric Acid (35% to 60%)	F	X	F	X	X	X	G	G	X	X	X	X	X	X	X	X	X	G
Nitric Acid (over 60%)	X	X	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	G
Nitrobenzene	G	G	X	X	X	X	G	G	—	X	X	X	X	X	X	F	G	G
Nitrogen Gas ◇	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G
Nitrous Oxide	G	G	X	X	X	X	G	G	F	X	X	G	X	X	X	G	G	G
Oleic Acid	G	G	F	F	F	X	G	G	G	F	F	X	G	F	G	F	F	G
Oleum (Fuming Sulfuric Acid)	X	X	X	X	X	X	G	G	X	X	X	X	X	X	X	X	F	G

G - Good F - Fair X - Not Recommended
 ◇ Use Pinpricked hose for gas applications

— - Insufficient Information

*For Intermittent Transfer Only

**Use Approved Freon Hose

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Oxalic Acid	G	G	G	X	X	X	G	G	X	G	X	X	X	—	G	F	X	G
Oxygen (non-breathing, non-welding) ◇	G	G	G	F	F	G	G	G	G	G	G	F	G	G	G	G	G	G
Ozone (300 pphm)	F	F	X	X	X	X	G	G	X	G	G	X	X	G	G	—	F	G
Paint (Solvent Base)	G	G	X	F	F	X	G	G	G	X	X	X	—	X	—	G	G	G
Palmitic Acid	G	G	F	F	F	F	G	G	G	F	X	X	G	X	G	X	F	F
Paper Mill Liquors	G	G	X	F	F	F	G	G	X	G	F	F	X	X	—	—	—	—
Pentane	G	G	X	G	G	F	G	G	—	X	F	X	G	X	G	G	G	G
Perchloroethylene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	F	G	G
Petroleum Ether	G	G	X	G	F	X	G	G	G	X	X	X	—	G	G	G	G	G
Petroleum Oils	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	G	G	G
Phenol	G	G	X	X	X	X	G	G	X	X	X	X	X	—	G	F	X	F
Phosphoric Acid (to 85%)	G	G	G	X	X	F	G	G	X	G	G	F	X	X	X	X	X	F
Picric Acid (Molten)	X	X	X	X	X	X	G	G	X	X	F	X	X	X	X	X	X	F
Picric Acid (Solution)	G	G	X	F	F	X	G	G	X	F	G	X	X	F	X	X	X	F
Potassium Chloride	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	F	X	G
Potassium Cyanide	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G
Potassium Dichromate	G	G	G	X	X	X	G	G	—	G	X	X	—	G	G	X	G	G
Potassium Hydroxide	G	G	G	F	F	F	G	G	F	G	G	G	F	X	G	F	X	G
Potassium Permanganate	G	G	G	X	X	X	G	G	X	G	G	G	X	X	—	—	—	—
Potassium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	F	F	G
Propane Liquid***	—	—	—	G	—	—	—	G	—	—	—	—	—	—	—	G	G	G
Propylene Glycol	G	G	F	G	F	G	G	G	—	G	G	G	G	—	G	F	G	G
Pyridine	G	G	X	X	X	X	G	G	X	F	X	X	X	X	X	F	G	G
Sea Water	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	F	G
Silver Nitrate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	—	X	X	F
Skydrol	G	G	X	X	X	X	G	G	G	G	X	X	—	X	G	G	G	G
Soap Solution	G	G	G	G	G	F	G	G	G	G	G	X	G	G	G	G	G	G
Sodium Bicarbonate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Sodium Bisulfate	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	F	F	F

G - Good F - Fair X - Not Recommended — - Insufficient Information
 ***Use Propane Approved Hose Only ◇ Use Pinpricked Hose for Gas Applications

*For Intermittent Transfer Only

**Use Approved Freon Hose

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Sodium Bisulfite	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	X	G
Sodium Borate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G
Sodium Carbonate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G
Sodium Chloride	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	F	G
Sodium Cyanide	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	F	G
Sodium Hydroxide	G	G	G	F	F	G	G	G	F	G	G	G	—	X	F	F	X	G
Sodium Hypochlorite	G	G	G	X	X	X	G	G	X	G	G	X	G	X	F	X	X	F
Sodium Nitrate	G	G	G	G	G	F	G	G	G	G	G	G	G	F	G	F	G	G
Sodium Perborate	G	G	G	G	G	X	G	G	F	G	X	G	G	X	X	F	F	G
Sodium Peroxide	G	G	X	F	F	F	G	G	X	G	F	X	G	X	X	X	F	G
Sodium Phosphates	G	G	G	G	G	F	G	G	G	G	G	G	G	G	X	F	F	F
Sodium Silicate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Sodium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Sodium Sulfide	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	G
Sodium Thiosulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	X	X	G
Soybean Oil	G	G	F	G	G	F	G	G	—	F	G	X	G	G	G	G	G	G
Stannic Chloride	G	G	G	G	G	X	G	G	X	G	G	G	G	G	G	X	X	X
Steam 450°F	X	X	X	X	X	X	G	G	X	G	X	X	X	X	X	F	F	G
Stearic Acid	G	G	F	F	F	F	G	G	G	F	F	X	G	G	G	X	X	G
Stoddard Solvent	G	G	X	G	G	F	G	G	G	X	X	X	G	G	G	G	G	G
Styrene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G
Sulfur 70°F	G	G	F	X	X	G	G	G	G	G	G	X	G	F	G	X	X	G
Sulfur 200°F	X	X	X	X	X	X	G	G	X	X	G	X	X	X	X	X	X	G
Sulfur Chloride	G	G	X	X	X	X	G	G	X	X	F	X	X	X	G	X	X	X
Sulfur Dioxide	X	X	X	X	X	X	G	G	X	G	X	X	X	X	X	X	—	G
Sulfuric Acid (under 50%)	G	G	G	X	X	X	G	G	X	G	G	X	X	X	X	X	X	X
Sulfuric Acid (51% to 70%)	G	G	G	X	X	X	G	G	X	F	G	X	X	X	X	X	X	X

G - Good

F - Fair

X - Not Recommended

— - Insufficient Information

*For Intermittent Transfer Only

**Use Approved Freon Hose

***Use Propane Approved Hose Only

◇ Use Pinpricked Hose for Gas Applications

Application Data

Chemical Compatibility Chart

FLUID	HOSE MATERIAL															METALS		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neo-prene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	Brass	Steel	316 Stainless
Sulfuric Acid (71% to 95%)	G	F	X	X	X	X	G	G	X	F	F	X	X	X	X	X	X	X
Sulfuric Acid (96% to 98%)	G	X	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X
Tannic Acid	G	G	G	F	F	F	G	G	X	G	G	G	G	G	G	F	X	G
Tar	X	X	X	F	F	F	G	G	G	X	X	X	G	F	F	F	F	G
Tartaric Acid	G	G	G	G	G	F	G	G	G	G	G	G	—	G	G	F	X	F
Tetrachloroethane	G*	G*	X	X	X	X	G	G	—	X	X	X	X	X	X	—	—	G
Tetrahydrofuran (THF)	G	G	X	X	X	X	G	G	—	X	X	X	—	X	—	—	—	G
Toluene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G
Transmission Oil (Petrol. Base)	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	G	G	G
Trichloroethane	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G
Trichloroethylene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G
Tung Oil	G	G	—	G	G	F	G	G	—	X	F	X	G	F	X	F	G	G
Turpentine	G	G	X	F	F	X	G	G	G	X	X	X	F	X	F	F	G	G
Urea (Water Solution)	G	G	G	X	X	G	G	G	G	G	G	G	G	G	G	—	G	G
Uric Acid	G	G	G	—	—	—	G	G	G	—	—	—	X	X	—	—	—	F
Varnish	G	G	X	X	X	X	G	G	G	X	X	X	—	X	F	G	G	G
Vegetable Oil (Non-food)	G	G	F	G	G	X	G	G	G	X	G	X	—	G	—	G	G	G
Vinegar	G	G	G	F	F	G	G	G	X	G	G	F	—	X	F	X	F	G
Vinyl Acetate	G	G	X	X	X	X	G	G	—	F	X	X	—	X	—	F	G	G
Water (non-potable)	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Water—Glycol Mixture	G	G	X	G	G	G	G	G	G	G	X	F	X	X	G	G	G	G
Water—Petroleum Mixture	G	G	—	G	G	F	G	G	G	X	F	X	G	X	G	G	G	G
Xylene	G*	G*	X	X	X	X	G	G	G	X	X	X	F	X	X	G	G	G
Zinc Chloride	G	G	G	G	G	G	G	G	X	G	G	G	X	G	X	X	X	X
Zinc Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	X	X	X	G

*G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose*
****Use Propane Approved Hose Only ◇ Use Pinpricked Hose for Gas Applications*