

Chemical Resistance & Effusion Data for PTFE Hose

Material Compatibility Key: 1. Excellent 2. Acceptable 3. Not Recommended 0. No Information, Test Before Using

Effusion Chart Key:

- A. Effusion will occur with potential to displace breathable air in an enclosed environment.
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CHEMICAL	PTFE HOSE	FITTING MATERIAL				EFFUSION
		CS	304SS	316SS	BRASS	
Acetaldehyde	1	1	1	1	1	B
Acetic Acid Glacial	1	0	2	2	0	
Acetic Acid 30%	1	3	2	2	3	
Acetic Anhydride	1	3	2	2	3	
Acetone	1	1	1	1	1	
Acetylene	1	0	1	1	2	C
Acrylonitrile	1	1	1	1	0	
Alum Ammonium or Potassium	1	3	2	2	3	
Aluminum Acetate	1	0	1	1	3	
Aluminum Bromide	1	3	2	2	3	
Aluminum Chloride	1	3	2	2	3	
Aluminum Fluoride	1	3	2	2	3	
Aluminum Hydroxide	1	0	1	1	1	
Aluminum Nitrate	1	3	1	1	0	
Aluminum Salts	1	0	2	2	0	
Aluminum Sulfate	1	3	3	2	3	
Ammonia, Anhydrous	1	1	1	1	0	
Ammonia, Aqueous	1	0	1	1	3	
Ammonium Carbonate	0	1	1	1	0	
Ammonium Chloride	1	0	2	2	3	
Ammonium Hydroxide	1	2	1	1	3	
Ammonium Metaphosphate	1	1	1	1	0	
Ammonium Nitrate	1	1	1	1	3	
Ammonium Nitrite	0	0	1	1	0	
Ammonium Persulfate	0	0	1	1	0	
Ammonium Phosphate	1	3	2	1	0	
Ammonium Sulphate	1	1	1	1	3	
Ammonium Thiocyanate	1	1	1	1	0	
Amyl Acetate	1	3	1	1	1	
Amyl Alcohol	1	1	1	1	1	
Amyl Chloride	1	0	1	1	0	
Amyl Chloronaphthalene	1	0	1	1	0	
Amyl Naphthalene	1	0	1	1	0	
Aniline	1	2	1	1	3	
Aniline Dyes	1	3	1	1	0	
Aniline Hydrochloride	1	0	3	3	3	
Animal Fats	1	1	1	1	0	
Aqua Regia	1	0	3	3	0	
Arsenic Acid	1	2	0	1	0	
Askarel	0	1	1	1	1	

CHEMICAL	PTFE HOSE	FITTING MATERIAL				EFFUSION
		CS	304SS	316SS	BRASS	
Asphalt	1	1	1	1	2	
Barium Carbonate	1	2	1	1	1	
Barium Chloride	1	3	1	1	2	
Barium Hydroxide	1	2	1	1	0	
Barium Sulfate	1	1	1	1	2	
Barium Sulfide	1	3	1	1	3	
Beer	1	2	1	1	1	
Beet Sugar Liquors	1	1	1	1	0	
Benzene	1	1	1	1	1	
Benzenesulfanic Acid	0	3	0	2	0	
Benzaldehyde	1	1	0	0	0	
Benzine	1	1	1	1	1	B
Benzyl Alcohol	1	1	1	1	0	
Benzyl Benzoate	1	1	1	1	0	
Benzyl Chloride	1	1	0	0	0	
Bismuth Carbonate	1	1	1	1	0	
Black Sulphate Liquor	1	1	1	1	0	
Blast Furnace Gas	1	1	1	1	1	C
Borax	1	2	1	1	2	
Bordeaux Mixture	1	0	1	1	0	
Boric Acid	1	3	2	1	3	
Bunker Oil	1	1	1	1	1	
Butadiene	1	0	1	1	1	
Butane	1	1	1	1	1	C
Butter Oil	1	1	1	1	1	
Butyric Acid	1	3	1	1	2	
Butyl Acetate	1	2	1	1	1	
Butyl Alcohol	1	1	1	1	1	
Butyl Amine	0	1	1	1	1	
Butyl Carbital	1	1	1	1	1	
Butyl Stearate	1	1	1	1	1	
Butyl Mercapatan	1	0	1	1	0	
Butyraldehyde	1	0	0	0	1	
Calcium Acetate	1	1	1	1	1	
Calcium Bisulfate	1	0	2	1	3	
Calcium Bisulfite	1	0	1	1	0	
Calcium Carbonate	1	1	1	1	1	
Calcium Chlorate	1	0	2	1	0	
Calcium Chloride	1	3	2	1	2	
Calcium Hydroxide	1	3	3	1	2	

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CHEMICAL	PTFE HOSE	FITTING MATERIAL				EFFUSION
		CS	304SS	316SS	BRASS	
Calcium Hypochlorite	1	0	3	2	3	
Calcium Nitrate	1	1	1	1	1	
Calcium Silicate	1	1	1	1	1	B
Calcium Sulfate	1	1	1	1	1	
Calcium Sulfide	1	1	1	1	0	
Cane Sugar Liquors	1	1	1	1	2	
Carbolic Acid	1	3	1	1	3	
Carban Dioxide	1	1	1	1	1	A
Carban Disulfide	0	2	1	1	2	
Carbonic Acid	1	3	1	1	3	
Carban Manxide	1	1	1	1	1	C
Carban Tetrachloride	1	3	2	2	2	
Castor Oil	1	1	1	1	1	
Caustic Soda	1	2	1	1	3	
Cellosolve, Acetate	1	1	1	1	0	
Cellosolve, Butyl	1	1	1	1	0	
Cellulube	1	1	1	1	1	
Chlorine, Gaseous, Dry*	*	2	3	3	2	C
Chlorine, Gaseous, Wet*	*	3	3	3	3	B
Chlorine Trifluoride	0	3	0	0	0	C
Chloroacetic	1	3	3	3	2	
Chlorobenzene	1	1	1	1	1	
Chlorobromomethane	1	1	1	1	1	
Chloroform	1	1	1	1	1	
0-Chloronaphthalene	1	1	1	1	1	
Chlorotoluene	1	1	1	1	1	
Chromic Acid	1	3	3	2	3	
Citric Acid	1	3	3	1	3	
Cod Liver Oil	1	3	1	1	3	
Coke Over Gas	1	1	1	1	0	
Copper Chloride	1	3	3	1	3	
Copper Chanide	1	0	1	1	3	
Copper Sulfate	1	3	1	1	3	
Corn Oil	1	3	1	1	3	
Corn Syrup	1	1	1	1	0	
Cottonseed Oil	1	2	1	1	3	
Creosote	1	2	1	1	3	
Cresol	1	2	1	1	0	
Crude Wax	1	1	1	1	1	
Cutting Oil	1	1	1	1	1	

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		CS	304SS	316SS	BRASS	
Cyclohexane	1	1	1	1	1	
Cyclohexanone	1	0	1	1	0	
Cymene	1	0	0	0	1	
Decalin	1	0	0	0	1	
Denatured Alcohol	1	1	1	1	1	
Diacetone	1	1	1	1	1	
Diacetone Alcohol	1	1	1	1	1	
Dibenzyl Ether	1	1	1	1	1	
Dibutyl Ether	1	1	1	1	1	
Dibutyl Phthalate	1	1	1	1	1	
Dibutyl Sebacate	1	1	1	1	1	
Dichlorobenzene	1	0	1	1	1	
Diesel Oil	1	1	1	1	1	
Diethylamine	1	3	0	2	3	
Diethyl Ether	1	1	1	1	1	B
Diethylene Glycol	1	1	1	1	1	
Diethyl Phthalate	1	0	1	1	1	
Diethyl Sebacate	1	0	1	1	1	
Di-Isobutylene	0	0	1	1	1	
Di-Isopropyl Keytone	1	0	1	1	1	
Dimethyl Aniline	1	0	0	0	1	
Dimethyl Formamide	0	1	1	1	0	
Dimethyl Phthalate	1	0	0	0	1	
Diocetyl Phthlatate	1	1	1	1	1	
Dioxane	1	1	1	1	1	
Dipentene	1	1	1	1	1	
Ethanolamine	1	1	1	1	1	
Ethyl Acetate	1	1	1	1	1	
Ethyl Atrylate	0	1	1	1	0	
Ethyl Alcohol	1	1	1	1	2	
Ethyl Benzene	1	1	1	1	1	
Ethyl Cellulose	1	1	1	1	1	
Ethyl Chloride	1	2	1	1	2	
Ethyl Ether	1	2	1	1	1	
Ethyl Mertaptan	1	2	0	0	2	B
Ethyl Pentochlorobenzene	1	2	1	1	1	
Ethylene Chloride	1	2	1	1	2	
Ethylene Chlorohydrin	1	0	0	0	0	
Ethylene Diamine	1	0	0	0	1	
Ethylene Glycol	1	2	1	1	1	

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		CS	304SS	316SS	BRASS	
Fatty Acids	1	0	1	1	0	
Ferric Chloride	1	3	3	3	3	
Ferric Nitrate	1	3	1	1	0	
Ferric Sulfate	1	3	1	1	3	
Ferrous Chloride	1	3	1	2	2	
Ferrous Nitrate	1	0	1	1	0	
Ferrous Sulfate	1	3	1	1	2	
Fluoroboric Acid	1	0	1	1	0	
Formaldehyde	1	0	1	1	1	
Formic Acid	1	3	1	2	1	
Freon 12	2	3	1	1	0	A
Freon 114	2	3	1	1	0	A
Fuel Oil	1	2	2	2	1	
Fumaric Acid	0	0	1	1	0	
Furon Furfuran	1	1	1	1	1	
Fufural	1	2	1	1	1	
Gallic Acid	1	3	1	1	0	
Gasoline	1	2	1	1	1	
Glauber's Salt	0	1	1	1	0	
Glucose	1	1	1	1	1	
Glue	1	2	1	1	3	
Glycerin	1	2	1	1	1	
Glycols	1	1	1	1	1	
Green Sulfate Liquor	1	1	1	1	0	
n-Hexaldehyde	1	1	1	1	1	
Hexane	1	1	1	1	1	
Hexene	1	1	1	1	1	
Hexyl Alcohol	1	1	1	2	0	
Hydraulic Oil, Petroleum	1	1	1	1	1	
Hydrochloric Acid, 15%	1	3	3	3	3	B
Hydrochloric Acid, 37%	1	3	3	3	3	B
Hydrocarbon Acid	1	3	1	1	3	
Hydrofluoric Acid Concentrated	1	3	3	3	3	
Hydrofluosilicic Acid	1	0	3	3	3	
Hydrogen, Gaseous	*	1	1	1	1	C
Hydrogen Peroxide, 70%	1	3	2	1	3	
Hydrogen Sulfide, Gaseous	1	3	2	1	3	
Hydroquinone	0	1	0	1	0	
Isobutyl Alcohol	1	1	1	1	2	
Iso Octane	1	1	1	1	1	

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		CS	304SS	316SS	BRASS	
Isopropyl Acetate	1	1	1	1	1	
Isopropyl Alcohol	1	1	1	1	2	
Isopropyl Ether	1	1	1	1	1	
Kerosene	1	1	1	1	1	
Lacquers	1	3	3	1	1	
Lacquer Solvents	1	3	3	1	1	B
Lactic Acid	1	3	2	1	2	
Lard	1	1	1	1	3	
Lead Acetate	1	2	1	1	1	
Lead Nitrate	0	1	1	1	0	
Lime Bleath	0	3	2	1	0	
Linoleic Acid	1	0	0	0	0	
Linseed Oil	1	2	1	1	2	
Lubricating Oils, Petroleum	1	1	1	1	1	
Magnesium Chloride	1	3	2	1	2	
Magnesium Hydroxide	1	1	1	1	0	
Magnesium Sulfate	1	2	1	1	1	
Malic Acid	1	2	2	1	0	
Mercuric Chloride	1	3	1	1	3	B
Mercury	1	1	1	1	3	
Mesityl Oxide	1	1	1	1	1	
Methyl Acetate	1	1	1	1	1	
Methyl Atrylate	0	1	1	1	1	
Methyl Alcohol	1	1	1	1	2	C
Methyl Bromide	1	1	1	1	1	
Methyl Butyl Ketone	0	1	1	1	1	
Methyl Chloride	1	1	1	1	1	
Methylene Chloride	1	1	1	1	1	
Methyl Ethyl Ketone (MEK)	1	1	1	1	1	
Methyl Formate	1	1	1	1	1	B
Methyl Isobutyl Ketone	1	1	1	1	1	
Methyl Methacrylate	1	1	1	1	1	
Methyl Salicylate	1	1	1	1	1	
Milk	1	3	1	1	3	
Mineral Oil	1	1	1	1	1	
Monochlorobenzene	1	1	1	1	1	
Monoethanolamine	0	1	1	1	1	
Naphtha	1	2	1	1	1	
Naphthalene	1	0	1	1	0	
Napthenic Acid	1	0	2	1	0	

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		CS	304SS	316SS	BRASS	
Natural Gas	1	1	1	1	2	
Nickel Acetate	1	1	1	1	1	
Nickel Chloride	1	3	2	2	3	
Nickel Sulfate	1	0	2	1	3	
Niter Coke	0	3	2	1	0	
Nitric Acid, All Concentrations	1	3	2	2	3	
Nitric Acid, Red Fuming	1	3	2	2	3	
Nitrobenzene	1	1	1	1	1	
Nitroethane	1	0	1	1	1	
Nitrogen, Gaseous	1	1	1	1	1	A
Nitrogen Tetroxide	0	0	0	2	0	
n-Octane	0	1	1	1	1	
Octyl Alcohol	1	1	1	1	2	
Oil, SAE	1	1	1	1	1	
Oleic Acid	1	2	2	1	2	
Olive Oil	1	2	2	1	2	
Oxalic Acid	1	3	2	1	3	
Oxygen, Gaseous	1	1	1	1	1	A
Ozone	1	1	1	1	1	
Paint	1	0	1	1	1	
Palmitic Acid	1	1	2	1	3	
Peanut Oil	1	1	1	1	1	
Perchloric Acid	1	0	2	1	0	
Perchloroethylene	1	1	1	1	1	
Petroleum	1	1	1	1	1	
Phenol	1	3	1	1	3	
Phorone 1	1	1	1	1	1	
Piric Acid	1	3	1	1	3	
Pinene	1	1	1	1	1	
Pine Oil	1	1	1	1	0	
Plating Solution, Chrome	1	0	3	3	0	
Potassium Acetate	1	0	1	1	0	
Potassium Chloride	1	2	2	1	3	
Potassium Cyanide	1	2	1	1	3	
Potassium Dichromate	1	0	1	1	0	
Potassium Hydroxide, 30%	1	3	1	1	3	
Potassium Nitrate	1	3	1	1	2	
Potassium Sulfate	1	2	1	1	2	
Propane	1	1	1	1	1	A
Propyl Acetate	0	1	1	1	1	

CHEMICAL	PTFE HOSE	FITTING MATERIAL				EFFUSION
		CS	304SS	316SS	BRASS	
Propyl Alcohol	1	1	1	1	2	
Pyridine, 50%	1	0	1	1	1	
Red Oil	1	2	2	1	2	
Salicylic Acid	0	0	1	1	0	
Salt Water	1	2	1	1	3	
Sewage	1	3	1	1	1	
Silicone Greases	0	1	1	1	1	
Silicone Oils	0	1	1	1	1	
Silver Nitrate	1	2	1	1	2	
Skydrol 500 & 7000	1	1	1	1	0	
Soap Solutions	1	1	1	1	1	
Soda Ash	1	1	1	1	2	
Sodium Acetate	1	1	1	1	1	
Sodium Bicarbonate	1	2	1	1	2	
Sodium Bisulfite	1	1	1	1	0	
Sodium Borate	1	1	1	1	0	
Sodium Chloride	1	2	2	1	3	
Sodium Cyanide	1	2	1	1	3	
Sodium Hydroxide, 40%	1	2	1	1	3	
Sodium Hypochlorite	1	3	3	2	3	
Sodium Metaphosphate	1	3	1	1	3	
Sodium Nitrate	1	1	2	2	2	
Sodium Perborate	1	3	1	1	3	
Sodium Peroxide	1	3	1	1	3	
Sodium Phosphate	1	0	1	1	3	
Sodium Thiosulfate	1	3	1	1	3	
Soybean Oil	1	1	1	1	0	
Stannic Chloride	1	3	0	0	3	
Steam	1	1	1	1	2	A
Stearic Acid	1	3	2	1	3	
Stoddard Solvent	1	2	1	1	1	
Styrene	1	2	0	2	2	
Sucrose Solution	1	1	1	1	0	
Sulfur, 200 degrees F	1	2	2	1	3	
Sulfur Chloride	1	3	3	2	3	
Sulfur Dioxide	1	2	1	1	1	C
Sulfur Trioxide	1	2	2	2	0	B
Sulfuric Acid, 10%	1	3	3	2	3	
Sulfuric Acid, 98%	1	2	3	2	3	
Sulfuric Acid, Fuming	1	2	0	1	3	

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		CS	304SS	316SS	BRASS	
Sulfurous Acid, 10%	1	3	2	1	3	
Sulfurous Acid, 75%	1	3	3	2	3	
Tonic Acid, 10%	1	2	1	1	3	
Tar, Bituminous	1	1	1	1	2	
Tartaric Acid	1	0	2	2	0	
Terpineol	1	0	0	0	0	
Titanium Tetrachloride	0	1	2	2	3	
Toluene	1	1	1	1	1	
Toluene Diisocyanate	0	0	0	0	0	
Transformer Oil	1	1	1	1	1	
Transmission Fluid, Type A	1	1	1	1	1	
Tributoxyethyl Phosphate	1	1	0	0	0	
Tributyl Phosphate	1	1	0	0	0	
Trichlorethylene	1	3	0	1	1	
Tricresyl Phosphate	1	1	0	2	0	
Tung Oil	1	1	1	1	1	
Turpentine	1	0	1	1	2	
Urea Solution, 50%	1	1	1	1	0	
Varnish	0	2	1	1	2	
Vegetable Oils	1	1	1	1	0	

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		CS	304SS	316SS	BRASS	
Versilube	1	1	1	1	1	
Vinegor	1	3	2	1	3	
Vinyl Chloride	1	2	1	1	3	C
Water	1	2	1	1	1	
Whiskey, Wines	1	3	2	1	3	
Xylene	1	2	2	2	0	
Zinc Acetate	1	1	1	1	1	
Zinc Chloride	1	3	2	1	3	
Zinc Sulfate	1	3	2	1	3	

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Technical Considerations

Unique service conditions can effect the selection and safe performance of Fluoropolymer hose in applications that involve conductive media, permeating gasses and other technical considerations. The following Technical Bulletins are provided on our website as further resources to assist you in the proper selection of Amnitec products.

- Technical Bulletin Anti-Static
- Technical Bulletin Effusion
- Technical Bulletin Chemical Resistance
- Technical Bulletin Hytrex Hose Covering