PTFE Hose

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WARNING

Hose has a finite lifespan. It is difficult to predict due to many contributing factors. We recommend hoses be inspected every six months for signs of wear, and replaced annually. In applications where hoses carry dangerous media or other critical applications we recommend hoses be inspected and replaced more frequently.

Medium Pressure Smooth Bore Hose - SERIES SB

CONSTRUCTION:

Smooth Bore Hose is constructed of an extruded virgin PTFE inner-core or carbon black dissipative PTFE with type 304 reinforcing stainless steel braid. This braid acts as both a protective covering and pressure carrier. Smooth bore hose handles "problem" fluids such as solvents, acids, fuels, chemicals and other types of the toughest service applications. It is available with thin or heavy wall tubing of polytetrafluoro-ethylene (PTFE).

BENEFITS:

- Temperature Rating: -65°F (-54°C) to +450°F (+230°C)
- High working and burst pressures
- Low-friction surface provides high flow rates
- Most cost effective of all PTFE lined hoses
- Easily drained and/or cleaned

PART NUMBER			ACTUAL SIZE		MAXIMUM WORKING PRESSURE	MINIMUM BURST PRESSURE	MINIMUM BEND RADIUS	APPROX.. WEIGHT/FT.
WHITE	BLACK	NOMINAL ID	I D	O D				
SB-3	SB-3 Blk	3/16"	.125"	.23"	3000 PSI	12000 PSI	2.0"	.050 lbs.
SB-4	SB-4 Blk	1/4"	.19"	.30"	3000 PSI	12000 PSI	2.0"	.060 lbs.
SB-5	SB-5 Blk	5/16"	.25"	.37"	3000 PSI	12000 PSI	2.3"	.070 lbs.
SB-6	SB-6 Blk	3/8"	.32"	.40"	2500 PSI	10000 PSI	3.9"	.090 lbs.
SB-8	SB-8 Blk	1/2"	.41"	.52"	2000 PSI	8000 PSI	4.7"	.115 lbs.
SB-10	SB-10 Blk	5/8"	.50"	.59"	1750 PSI	7000 PSI	5.3"	.150 lbs.
SB-12	SB-12 Blk	3/4"	.62"	.80"	1500 PSI	6000 PSI	6.5"	.225 lbs.
SB-16	SB-16 Blk	1"	.87"	1.05"	1000 PSI	4000 PSI	7.8"	.285 lbs.
SB-20Z	SB-20Z Blk	1-1/4"	1.13"	1.38"	1000 PSI	4000 PSI	11.0"	.585 lbs.

Open Pitch Extruded Convoluted Hose - SERIES CT/BCT

CONSTRUCTION:

The CT/BCT Series is made with extruded seamless vacuum-formed white or black tube of open-pitch convoluted PTFE. The black conductive tubing is used for static dissipative purposes. Both are protected by high coverage stainless steel braid. The internal profile of the hose is formatted for high flow rates and the helical design aids in self draining. All fittings have been designed specially to add to the service life of the assembly of the hose.

BENEFITS:

- Temperature Rating: -65°F (-54°C) to +450°F (+230°C)
- High pressure ratings
- Open pitch assists self-draining and hose cleaning
- Steam cleanable
- Will not delaminate - Suitable for steam applications or thermal cycling
- Flexible design for easy installation
- Light weight
- Can be autoclaved
- Long life impulse

NOTE: POLYPROPYLENE BRAIDED CONVOLUTED PTFE HOSE AVAILABLE

PART #		NOMINAL HOSE SIZE		MAXIMUM WORKING PRESSURE	MINIMUM BURST PRESSURE	MINIMUM BEND RADIUS	APPROX. WEIGHT/FT.
WHITE	BLACK	I D	O D				
CT-06	BCT-06	0.37"	0.56"	1850 PSI	7400 PSI	2.0"	.23 lbs.
CT-08	BCT-08	0.50"	0.75"	1500 PSI	6000 PSI	3.0"	.27 lbs.
CT-12	BCT-12	0.75"	1.01"	1300 PSI	5200 PSI	3.5"	.43 lbs.
CT-16	BCT-16	1.00"	1.30"	1000 PSI	4000 PSI	4.0"	.63 lbs.
CT-20	BCT-20	1.25"	1.57"	900 PSI	3600 PSI	4.5"	.75 lbs.
CT-24	BCT-24	1.50"	1.89"	700 PSI	2800 PSI	4.5"	.88 lbs.
CT-32	BCT-32	2.00"	2.38"	500 PSI	2000 PSI	5.0"	1.11 lbs.
CT-40	BCT-40	2.5"	3.25"	212 PSI	850 PSI	13"	1.35 lbs.
CT-48	BCT-48	3"	3.87"	175 PSI	700 PSI	14"	1.75 lbs.

Smooth Bore PTFE Hose - True Bore - SERIES - TW/TB

CONSTRUCTION:

Smooth Bore Hose is constructed of an extruded virgin PTFE inner-core. This core can be either white or black (static dissipative) PTFE with type 304 reinforcing stainless steel braid. This braid acts as both a protective covering and pressure carrier. Smooth bore hose handles "problem" fluids such as solvents, acids, fuels, chemicals and other types of the toughest service applications.

BENEFITS:

- Temperature Rating: -100°F to +450°F
- High working and burst pressures
- Low-friction surface of smooth bore hose provides high flow rates
- FDA and pharmaceutical approved
- Easily drained and/or cleaned

HOSE SIZE I D (IN.)	PART NUMBER WHITE/BLACK	NOMINAL O D (IN.)	WORKING PRESSURE (PSI)	BURST PRESSURE (PSI)	MIN. BEND RADIUS (IN.)	VACUUM IN./HG.	WEIGHT PER FOOT (POUNDS)
1/8"	-2TW/-2TB	0.240	3,000	15000	1.5	29.9	0.05
1/4"	-4TW/-4TB	0.380	3,000	13500	2.5	29.9	0.08
3/8"	-6TW/-6TB	0.520	2,500	10000	3.5	29.9	0.12
1/2"	-8TW/-8TB	0.660	2,000	8500	4.0	29.9	0.15
3/4"	-12TW/-12TB	0.880	1,200	4800	7.5	29.9	0.22
1"	-16TW/-16TB	1.160	800	3200	12.0	20.0	0.31
1-1/2"	-24TW/-24TB	1.740	900	4000	15.0	15.0	0.44

Convoluted PTFE Flared-Tube Designed Hose- SERIES FT/FTB

CONSTRUCTION:

Series FT/FTB Hose is constructed of heavy wall, convoluted, seamless extruded black or white conductive PTFE tubing locked in a stainless steel braid. It is the latest in hoses lined with PTFE with flared tubing. With this process, the convoluted tubing is fed through the flange retainer, flared over the face of the flange, and effectively isolates the flange from chemical transference. It is ideal in the prevention of internal corrosion to the fitting and chemical contamination.

BENEFITS:

- Temperature Rating: -65°F (-54°C) to +450°F (+230°C)
- Helical design aids in draining and cleaning
- Eliminates internal corrosion of fittings
- No metallic contamination or transfer of chemical from fitting
- Will not delaminate - suitable for steam applications or thermal cycling
- Seal is made on flare - no gaskets required - easier installation
- Reduces energy loss through fitting which gives higher flow rates

PART #		NOMINAL HOSE SIZE		MAXIMUM WORKING PRESSURE	MINIMUM BURST PRESSURE	MINIMUM BEND RADIUS
WHITE	BLACK	I D	O D			
FT-12	FTB-12	0.78"	1.08"	425 PSI	1700 PSI	3.0"
FT-16	FTB-16	0.97"	1.36"	350 PSI	1400 PSI	4.0"
FT-20	FTB-20	1.32"	1.70"	330 PSI	1350 PSI	5.5"
FT-24	FTB-24	1.49"	1.85"	275 PSI	1100 PSI	7.0"
FT-32	FTB-32	1.92"	2.43"	250 PSI	1000 PSI	8.5"
FT-48	FTB-48	2.91"	3.80"	100 PSI	400 PSI	12.0"
FT-64	FTB-64	3.92"	4.95"	100 PSI	400 PSI	18.0"

Smooth Bore Fittings

Available in Brass, Carbon Steel and Stainless Steel

Other Fittings Available

Flange Retainer

90° Female JIC Swivel

Female JIC Swivel

Male NPT

45° Female JIC Swivel

Tube Stub

Convoluted Fittings

Available in Carbon Steel and Stainless Steel

Tri-Clamp

Male NPT

Female JIC Swivel

Flange Retainer

PROTECTIVE HOSE COVERINGS

Spring Guard
Spring guard reduces kinking and protects the hose from abrasion and rough handling.

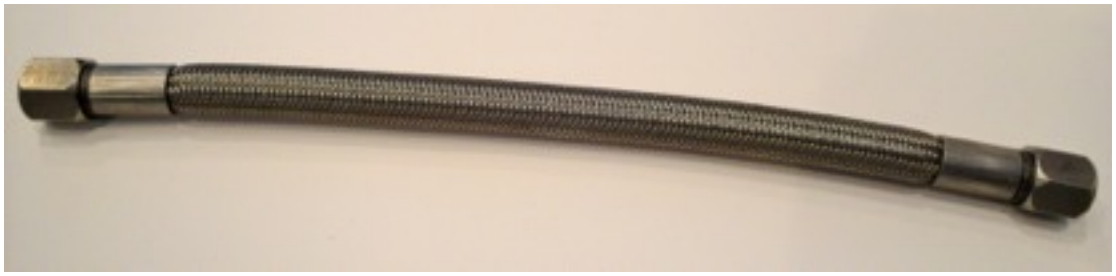
Armor Guard
A highly flexible heavy duty interlocked metal casing to protect the hose against severe handling abuse and over bending. This can be applied over the entire length or in short sections at the end connection.

Heat Shrink Tubing
To minimize hose O D, heat shrinkable tubing is used in applications where cleanliness is essential. This provides easy cleaning of the outer hose surface.

Nylon Sleeve
Woven nylon tubular sleeve is ideal for use as a protective covering and withstands temperature up to 275°F.

Silicone Fire Sleeve
This fiberglass sleeving has a coating of silicone rubber bonded to it which offers flame resistance and has a continuous operating temperature of 500°F.

Ultra High Pressure Hose - SERIES HP



CONSTRUCTION:

The HP Series is constructed of an inner core of carbon black static dissipative PTFE. Multiple stainless steel wires are braided together to form a single braid of protection. In sizes -12 through -24 an additional layer of braid is added between the PTFE inner core and the outer braid. For pneumatic applications, a post-sintered tube is used to reduce effusion. For liquid and hydraulic applications, a non-sintered PTFE tube provides performance without added cost. This hose comes standard with stainless steel JIC 37° female swivels.

BENEFITS:

- Temperature Rating: -65°F (-54°C) to +400°F (+204°C)
- Extreme high pressure hose
- Smooth bore improves flow rates
- Resists kinking
- Highly durable and unlimited shelf life
- Lightweight with tight bend radius
- Sizes up to 1 1/2" I.D.
- Meets SAE requirements of 100R8 and 100R9

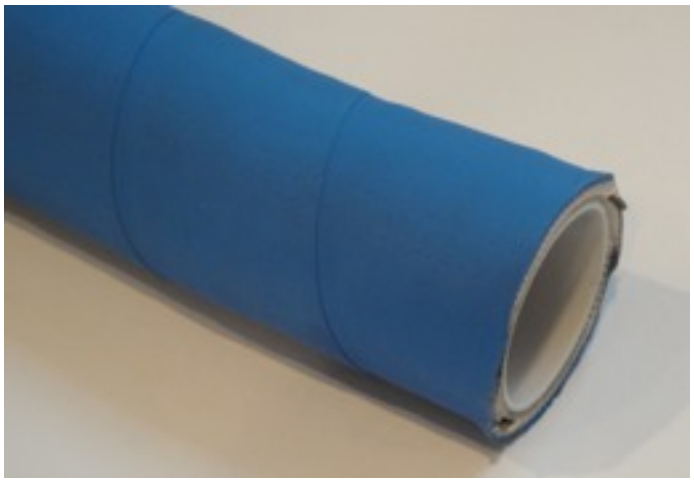
PART #	NOMINAL ID	ACTUAL I D	ACTUAL O D	MAXIMUM WORKING PRESSURE	TEST PRESSURE	MINIMUM BURST PRESSURE	HIGH TEMP. BURST PRESSURE	MINIMUM BEND RADIUS	APPROX. WEIGHT/ FT.
S-4HP	1/4"	.22"	.39"	5000 PSI	10000 PSI	16000 PSI	12000 PSI	1.50"	.10 lbs.
S-6HP	3/8"	.31"	.49"	5000 PSI	10000 PSI	16000 PSI	12000 PSI	2.5"	.16 lbs.
S-8HP	1/2"	.40"	.62"	5000 PSI	10000 PSI	16000 PSI	12000 PSI	2.88"	.23 lbs.
S-10HP	5/8"	.50"	.73"	5000 PSI	10000 PSI	16000 PSI	12000 PSI	3.25"	.32 lbs.
S-12HP	3/4"	.62"	.99"	5000 PSI	10000 PSI	16000 PSI	12000 PSI	3.88"	.66 lbs.
S-16HP	1"	.87"	1.27"	5000 PSI	10000 PSI	16000 PSI	9000 PSI	5.00"	1.02 lbs.
S-20HP	1-1/4"	1.12"	1.66"	5000 PSI	10000 PSI	16000 PSI	9000 PSI	12.00"	1.85 lbs.
S-24HP	1-1/2"	1.38"	1.90"	4000 PSI	8000 PSI	12000 PSI	9000 PSI	14.00"	1.91 lbs.

CONSTRUCTION:

The RC/RCB Series starts with a smooth, non-stick FDA approved white FEP fluoropolymer. PTFE and PFA liners can be custom ordered. Two plies of synthetic rubber reinforced with horizontal fabric braid are permanently bonded to the FEP tube. A wire helix is included to support the shape in full vacuum and to prevent kinking. This provides a grounded path for electrical charges through the exterior body of the hose. (For materials that may create a static buildup on the inner FEP liner, a black conductive FEP is required to dissipate the charge.) The hose is protected by an abrasion resistant rubber cover. The cover is weather resistant and will not fade or discolor with age.

BENEFITS:

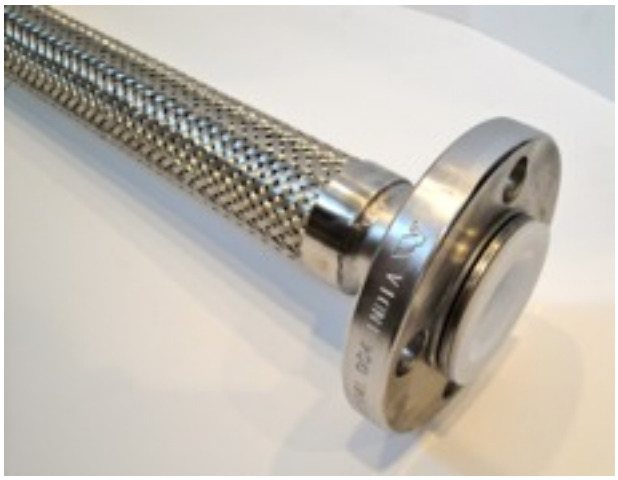
- Temperature Rating: -40°F (-40°C) to +300°F (+148°C)
- Smooth bore up to 4" I.D.
- Less turbulence and better flow rates are made possible by the smoothbore design
- Thermal insulation
- Easily drained and steam cleanable
- Feel of rubber hose



PART #		NOMINAL HOSE SIZE		MAXIMUM WORKING PRESSURE @ 70° F	MINIMUM BURST PRESSURE	VACUUM RATING @ 70° F	MINIMUM BEND RADIUS	APPROX. WEIGHT/FT.
WHITE	BLACK	I D	O D					
RC-08	RCB-08	0.50"	0.87"	550 PSI	2200 PSI	Full	3.0"	.33 lbs.
RC-12	RCB-12	0.75"	1.25"	450 PSI	1800 PSI	Full	3.5"	.60 lbs.
RC-16	RCB-16	1.00"	1.50"	450 PSI	1800 PSI	Full	4.0"	.73 lbs.
RC-24	RCB-24	1.50"	2.00"	400 PSI	1600 PSI	Full	8.5"	1.20 lbs.
RC-32	RCB-32	2.00"	2.50"	375 PSI	1500 PSI	Full	10.5"	1.45 lbs.
RC-48	RCB-48	3.00"	3.50"	175 PSI	700 PSI	Full	25.0"	2.40 lbs.
RC-64	RCB-64	4.00"	4.50"	150 PSI	600 PSI	Full	42.0"	3.55 lbs.

CONSTRUCTION:

Series MLT Hose construction starts with stainless steel braided metal hose. A smooth liner of extruded PTFE is inserted into the hose, locked in place, and flared over the flange faces or Tri-Clamp. The PTFE liner is stationary and will not move inside the hose. Gas build-up between layers is prevented with vent holes in the ends.



BENEFITS:

- Temperature Rating: -65°F (-54°C) to +350°F (+176°C)
- Smooth liner - no entrapment areas
- High flow rates
- Easily cleaned
- Offers rugged service
- PTFE protection against chemical attacks throughout the entire assembly

PART #	NOMINAL HOSE SIZE I D	NOMINAL HOSE SIZE O D	MAXIMUM WORKING PRESSURE @ 70° F	MINIMUM BURST PRESSURE @ 70° F	VACUUM RATING (HG) @ 70° F	APPROX. WEIGHT/FT.
MLT-16	1.00"	1.64"	500 PSI	2000 PSI	26"	2.00 lbs.
MLT-24	1.50"	2.33"	400 PSI	1600 PSI	26"	3.86 lbs.
MLT-32	2.00"	2.88"	300 PSI	1200 PSI	24"	5.00 lbs.
MLT-48	3.00"	3.94"	200 PSI	800 PSI	24"	5.25 lbs.
MLT-64	4.00"	4.98"	150 PSI	600 PSI	20"	5.60 lbs.
MLT-96	6.00"	7.00"	150 PSI	600 PSI	20"	13.00 lbs.
MLT-128	8.00"	9.10"	125 PSI	500 PSI	20"	20.00 lbs.
MLT-160	10.00"	11.20"	100 PSI	400 PSI	20"	26.00 lbs.
MLT-192	12.00"	13.22"	90 PSI	360 PSI	20"	34.50 lbs.

CHEMICAL RESISTANCE DATA

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

Chemical	Fitting Material PTFE	CS	304SS	316SS	Brass	Effusion
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/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	
Asphalt	1	1	1	1	2	
Barium Carbonate	1	2	1	1	1	
Barium Chloride	1	3	1	1	2	

Effusion Chart Key:

A. Effusion will occur with the potential to displace breathable air in an enclosed environment.

B. These compounds have the ability to effuse and with certain atmospheric conditions can corrode metallic components such as braid and fittings. Applications with these compounds require using hose assemblies only in well ventilated areas.

C. Chemicals in this category are in a gas phase at atmospheric pressures and at temperatures of 56°F or less.

CHEMICAL RESISTANCE DATA

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

Chemical	Fitting Material					Effusion
	PTFE	CS	304SS	316SS	Brass	
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	
Benzenesulfonic 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 Carbitol	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 Hydroixe	1	3	3	1	2	
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	

Effusion Chart Key:
A. Effusion will occur with the potential to displace breathable air in an enclosed environment.

B. These compounds have the ability to effuse and with certain atmospheric conditions can corrode metallic components such as braid and fittings. Applications with these compounds require using hose assemblies only in well ventilated areas.

C. Chemicals in this category are in a gas phase at atmospheric pressures and at temperatures of 56°F or less.

CHEMICAL RESISTANCE DATA

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

Chemical	PTFE	Fitting Material CS	304SS	316SS	Brass	Effusion
Carbon Dioxide	1	1	1	1	1	A
Carbon Disulfide	0	2	1	1	2	
Carbonic Acid	1	3	1	1	3	
Carbon Monoxide	1	1	1	1	1	C
Carbon 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
Chorine Trifluoride	0	3	0	0	0	C
Chloroacetic	1	3	3	3	2	
Chlorobenzene	1	1	1	1	1	
Cholorbromomethane	1	1	1	1	1	
Chloroform	1	1	1	1	1	
O-Chloronaphthalene	1	1	1	1	1	
Chorotoluene	1	1	1	1	1	
Chromic Acid	1	3	3	2	3	
Citric Acid	1	3	3	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 Syrup	1	1	1	1	0	
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	
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	

Effusion Chart Key:
A. Effusion will occur with the potential to displace breathable air in an enclosed environment.

B. These compounds have the ability to effuse and with certain atmospheric conditions can corrode metallic components such as braid and fittings. Applications with these compounds require using hose assemblies only in well ventilated areas.

C. Chemicals in this category are in a gas phase at atmospheric pressures and at temperatures of 56°F or less.

CHEMICAL RESISTANCE DATA

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

Chemical	PTFE	Fitting Material CS	304SS	316SS	Brass	Effusion
Dichlorobnzene	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	
Dioctyl 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	
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	
Flormaldehyde	1	0	1	1	1	
Formic Acid	1	3	1	2	1	
Freon 12	2	3	1	1	0	
Freon 114	2	3	1	1	0	A
Fuel Oil	1	2	2	2	1	A

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C. Chemicals in this category are in a gas phase at atmospheric pressures and at temperatures of 56°F or less.

CHEMICAL RESISTANCE DATA

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

Chemical	PTFE	Fitting Material CS	304SS	316SS	Brass	Effusion
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	
Hydrofluosilic 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	
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	

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Chemical	PTFE	Fitting Material CS	304SS	316SS	Brass	Effusion
Magnesium Sulfate	1	2	1	1	1	
Molic Acid	1	2	2	1	0	
Mercuric Chloride	1	3	1	1	3	
Mercury	1	1	1	1	3	
Mesityl Oxide	1	1	1	1	1	
Methyl Acetate	1	1	1	1	1	
Methyl Atrylote	0	1	1	1	1	
Methyl Alcohol	1	1	1	1	2	
Methyl Bromide	1	1	1	1	1	B
Methyl Butyl Ketone	0	1	1	1	1	
Methyl Chloride	1	1	1	1	1	B
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	
Naphthelene	1	0	1	1	0	
Naphthenic Acid	1	0	2	1	0	
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	

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CHEMICAL RESISTANCE DATA

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Chemical	PTFE	Fitting Material CS	304SS	316SS	Brass	Effusion
Palmitic Acid	1	1	2	1	3	
Peanut Oil	1	1	1	1	1	
Perchloric Acid	1	0	2	1	0	
Perchlorethylene	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	
Propyl Alcohol	1	1	1	1	2	
Pyricine, 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	

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Chemical	Fitting Material					Effusion
	PTFE	CS	304SS	316SS	Brass	
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°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	
Sulfurous Acid, 10%	1	3	2	1	3	
Sulfurous Acid, 75%	1	3	3	2	3	
Tonnic 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 Disocyanote	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 Phophate	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	
Versilube	1	1	1	1	1	
Vinegar	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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