Rubber Hose Contents (Section I)

No. GS80
GENERAL SERVICE AIR HOSE

Part Number	Inside Diameter	Outside Diameter	Working Pressure-PSI	Standard Reel
GS80-014-30	1/4”	33/64”	300	300’
GS80-038-30	3/8”	43/64”	300	300’
GS80-050-30	1/2”	53/64”	300	300’
GS80-058-30	5/8”	1-1/16”	300	300’
GS80-075-30	3/4”	1-9/64”	300	300’
GS80-100-30	1”	1-3/8”	300	300’
GS80-125-20	1-1/4”	1-7/8”	200	150’
GS80-150-20	1-1/2”	2-1/8”	200	150’
GS80-200-20	2”	2-39/64”	200	150’

Recommended As: A general service hose for air and water where maximum oil resistance is not needed. Ideal for general air, water service and oil mist lubricating lines.

Tube: Black Nitrile/SBR blend or Black EPDM

Reinforcement: Braided nylon.

Cover: Red EPDM blend. Excellent visibility. Resists gouging, cutting and weathering, and sunlight. Also available in black, yellow, blue, green and grey.

Lengths: Continuous on reels, cut and/or coupled to client’s individual specifications.

Couplings: Crowfoot, Dixlock, cam & groove, industrial quick connects.

No. WD
HEAVY DUTY WATER DISCHARGE HOSE

Part Number	Inside Diameter	Outside Diameter	Number of Plies	Weight LB/FT	Working Pressure-PSI
WD-125	1-1/4”	1-21/32”	4	.45	200
WD-150	1-1/2”	1-57/64”	4	.59	200
WD-200	2”	2-33/64”	4	.81	150
WD-250	2-1/2”	2-61/64”	4	1.08	150
WD-300	3”	3-35/64”	4	1.25	150
WD-400	4”	4-39/64”	4	1.62	150
WD-600	6”	6-35/64”	2	3.35	150
WD-800	8”	8-15/32”	2	4.92	150
WD-1000	10”	10-5/8”	1	5.10	150
WD-1200	12”	12-9/16”	1	5.8	100

Recommended As: Heavy duty water discharge hose for tough operating conditions.

Tube: Black EPDM & SBR blend.

Reinforcement: Multiple plies of spiral high tensile cord.

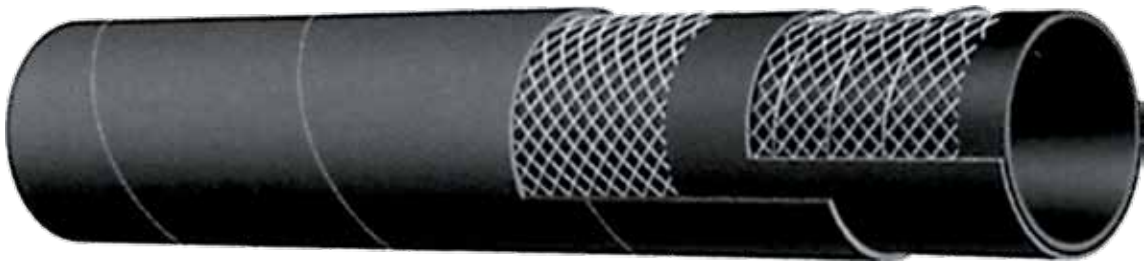
Cover: Black abrasion, weather, ozone & sunlight resistant, EPDM blended rubber.

Lengths: Standard 100 ft., cut and/or coupled to client’s individual specifications.

Couplings: Cam & Groove, combination nipples or pin lug short shank couplings attached with a single bolt, double bolt or band type clamps.

Also available in standard duty and heavy wall water discharge.

No. WSD
WATER SUCTION HOSE



Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working-Pressure-PSI
WSD-100	1”	1-3/8”	6”	.52	150
WSD-125	1-1/4”	1-21/32”	7”	.63	150
WSD-150	1-1/2”	1-59/64”	8”	.82	150
WSD-200	2”	2-1/2”	10”	1.15	150
WSD-250	2-1/2”	3”	15”	1.65	150
WSD-300	3”	3-1/2”	18”	2.11	150
WSD-350	3-1/2”	4”	14”	2.37	150
WSD-400	4”	4-19/32”	25”	3.05	150
WSD-500	5”	5-21/32”	29”	3.95	150
WSD-600	6”	6-45/64”	32”	4.55	150
WSD-800	8”	8-45/64”	40”	8.98	150
WSD-1000	10”	10-23/32”	50”	10.3	150
WSD-1200	12”	12-51/64”	60”	12.4	90

Recommended As: A general service water suction hose for use in construction, mining and agriculture.

Tube: Black EPDM blended rubber.

Temperature & Range: -40° To 185°F.

Reinforcement: Spiraled high tensile textile cords and double steel helix wire.

Cover: Black weather and ozone resistant, EPDM blended rubber.

Lengths: Standard 100 ft: 1” thru 6”; Standard 20 Ft: 8” thru 10”, also cut and/or coupled to client’s individual specifications.

Couplings: Cam And Groove, pin lug short shank couplings or combination nipples.

No. XLPE
CHEMICAL HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
XLPE-075	3/4”	1-7/32”	5”	.56	150
XLPE-100	1”	1-9/16”	6”	.77	150
XLPE-125	1-1/4”	1-7/8”	8”	.94	150
XLPE-150	1-1/2”	2-1/16”	9”	1.15	150
XLPE-200	2”	2-9/16”	11”	1.47	150
XLPE-250	2-1/2”	3-1/16”	13”	1.74	150
XLPE-300	3”	3-19/32”	15”	2.45	150
XLPE-400	4”	4-7/8”	20”	3.40	150
XLPE-600	6”	6-7/8”	48”	6.5	150

Recommended As: Suction and transfer for a wide variety of chemicals and solvents. Will handle 90% of existing chemicals. See chemical Resistance chart.

Tube: Beige, smooth modified cross-linked polyethylene (XLPE).

Temperature & Range: Normal maximum recommended operating temperature is 160°F intermittent use up to 176°F.

Reinforcement: Spiralled high tensile textile cords, and steel helix wire. For static grounding use helix wire.

Cover: Green corrugated abrasion and weather resistant EPDM Blend. Designed to resist general chemical and hydrocarbon exposure.

Lengths: Standard 100 ft., also cut and/or coupled to client’s individual requirements.

Couplings: Cam and Groove and combination nipples we recommend stainless steel.

Also available in discharge only.

No. UHMWPE
CHEMICAL HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
UHMWPE-075	3/4”	1-7/32”	5”	.40	150
UHMWPE-100	1”	1-15/32”	6”	.48	150
UHMWPE-125	1-1/4”	1-47/64”	7”	.60	150
UHMWPE-150	1-1/2”	1-31/32”	9”	.69	150
UHMWPE-200	2”	2-31/64”	11”	.90	150
UHMWPE-250	2-1/2”	3-1/32”	12”	1.16	150
UHMWPE-300	3”	3-5/8”	15”	1.93	150
UHMWPE-400	4”	4-21/32”	20”	2.55	150

Recommended For: Suction and transfer for a wide variety of chemicals and acids. Will handle 98% of existing chemicals. See chemical Resistance chart.

Tube: UHMWPE (Ultra High Molecular Weight Polyethylene).

Temperature & Range: Normal maximum recommended operating temperature is -40° to 176°F.

Reinforcement: Synthetic textile cords with 4 highly flexible steel helix wires.

Cover: Blue corrugated abrasion and weather resistant EPDM Blend. Designed to resist general chemical and hydrocarbon exposure.

Lengths: Standard 100 ft., also cut and/or coupled to client’s individual requirements.

Couplings: Cam and Groove and combination nipples we recommend stainless steel.

No. STEAM

STEAM HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
STEAM-050-E	1/2”	61/64”	5”	.32	250
STEAM-075-E	3/4”	1-3/16”	7-1/2”	.42	250
STEAM-100-E	1”	1-15/32”	10”	.61	250
STEAM-125-E	1-1/4”	1-3/4”	12-1/2”	.78	250
STEAM-150-E	1-1/2”	2-1/16”	15”	1.01	250
STEAM-200-E	2”	2-9/16”	20”	1.39	250
STEAM-250-E	2-1/2”	3-1/8”	26”	2.61	250
STEAM-300-E	3”	3-3/4”	32”	4.00	250
STEAM-400-E	4”	4-7/8”	44”	4.30	250

Designed For: High-pressure service. Saturated steam at pressures to 250 PSI and temperatures to 406°F. Superheated steam to 250 PSI and 450°F. Not for use with detergents. The steel wire braids provide maximum strength and also serve as a static wire. Hose meets MIL-H-28596B, Type 1, Grade A and may be used as a component to fabricate metal lined steam hose assemblies to MIL-H-29210. 10:1 safety factor (2500 Minimum burst) for steam applications.

Tube: Black EPDM, also available with a chlorobutyl tube.

Temperature & Range: -40°F to 406°/450°F.

Reinforcement: Steel wire braids.

Cover: Pinpricked red or black, smooth (wrapped finish) EPDM rubber compound to withstand high temperature, weather, abrasion and aging.

Lengths: 300’, cut and/or coupled to client’s individual requirements.

Couplings: Female ground joint or washer type with spuds attached with 2 or 4-bolt interlocking clamps.

No. TCH-100
TANK CLEANING HOSE

Part Number	Inside Diameter	Outside Diameter	Weight LB/FT	Working Pressure-PSI
TCH-100-15	1-1/2”	2-3/16”	1.2	250
TCH-100-20	2”	2-11/16”	1.4	250

Accord Style 100: Is a high pressure, special hose for cleaning cargo and bulk storage tanks aboard tankers, barges, in terminals and refineries.

Tube: Is SBR blend or EPDM compounded to resist hot salt water and cleansing agents.

Temperature & Range: 203°F (96°C) maximum.

Pressure: 250 PSI (17 Bar) working pressure, 1000 PSI (68 Bar) minimum burst pressure.

Ground Wires: 2 Stainless steel braided wires (19 strands 1mm diameter).

Reinforcement: Multiple plies of polyester - mildew resistant - will not wick.

Cover: 1/8” thick cover provides excellent resistance to abrasion, salt water, heat and ozone.

Depth Rings: Marked with bright yellow, 3” (75 mm) Wide depth rings every 5 ft. - indicating exact footage.

Lengths: Standard, (50 ft., 75 ft., 100 ft., 300 ft.) cut and coupled to client’s requirements.

Couplings: Non-sparking brass tank cleaning hose couplings or stainless steel couplings with brass or stainless steel 4-bolt interlocking clamps. Additionally, cam & groove couplings in brass and stainless steel with interlocking clamps.

Testing: All assemblies tested for electrical continuity.

Maximum Resistance: 7Ω to 18Ω for 50’ to 100’ lengths.

No. PD
PETROLEUM DISCHARGE HOSE

Part Number	Inside Diameter	Outside Diameter	Weight LB/FT	Working Pressure -PSI
PD-150	1-1/2”	1-57/64”	.61	150
PD-200	2”	2-13/32”	.81	150
PD-300	3”	3-29/64”	1.41	150
PD-400	4”	4-1/2”	1.9	150
PD-600	6”	6-1/2”	3.0	150

Recommended For: Oil discharge hose designed for use on trucks, docks or barges where a soft wall hose is required.

Tube: Black smooth nitrile rubber.

Temperature & Range: -40°F to 158°F.

Reinforcement: High strength synthetic cord plus anti-static copper wire and embedded steel helix wire.

Cover: Black corrugated (wrapped finish), highly abrasion resistant synthetic cover.

Lengths: Standard 100 ft., 200 ft., and 40 ft. over 10” diameter, also cut and/or coupled to client’s individual requirements.

Couplings: Cam and Groove and combination nipples preferably stainless steel.

No. PDL
PETROLEUM DISCHARGE LAYFLAT HOSE

Part Number	Inside Diameter	Outside Diameter	Weight LB/FT	Working Pressure-PSI
PDL-100	1”	1-1/4”	.14	300
PDL-150L	1-1/2”	1-11/16”	.21	150
PDL-150	1-1/2”	1-3/4”	.30	200
PDL-200L	2”	2-3/16”	.30	150
PDL-200	2”	2-1/4”	.44	250
PDL-250L	2-1/2”	2-11/16”	.42	150
PDL-300L	3”	3-3/16”	.46	150
PDL-300	3”	3-5/16”	.64	250
PDL-400L	4”	4-3/16”	.64	150
PDL-400	4”	4-3/8”	.86	250
PDL-600	6”	6-1/4”	1.42	250
PDL-800	8”	8-1/4”	2.1	200

Recommended For: Designed for delivery of fluids or gases, resistant to many products such as oil, grease, acids, bases, salts, sewage and seawater.

Tube: Black or yellow, Nitrile/PVC blend resistant to oil/weather.

Temperature & Range: -4°F to 176°F.

Reinforcement: Polyester reinforcement.

Cover: Ribbed, highly resistant to oil, abrasion and weathering.

Lengths: Standard 200 ft., and 100 ft. for 8” diameter, also cut and/or coupled to client’s individual requirements.

Couplings: Cam and Groove and combination nipples.

No. PSD

PETROLEUM SUCTION & DISCHARGE HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
PSD-075	3/4”	1-1/8”	4”	.40	150
PSD-100	1”	1-7/16”	5”	.49	150
PSD-125	1-1/4”	1-21/32”	6”	.65	150
PSD-150	1-1/2”	1-57/64”	7”	.98	150
PSD-200	2”	2-7/16”	10”	1.22	150
PSD-250	2-1/2”	3”	12”	1.70	150
PSD-300	3”	3-15/32”	15”	2.03	150
PSD-400	4”	4-9/16”	20”	3.42	150
PSD-500	5”	5-21/32”	26”	5.30	150
PSD-600	6”	6-51/64”	30”	7.22	150
PSD-800	8”	8-29/32”	48”	11.90	150

Recommended For: Suction and discharge application in tank car and truck transfer of gasoline, oil and other petroleum base products.

Tube: Smooth black nitrile rubber. Resistant to up to 50% Aromatics.

Temperature & Range: -40° to 212°F.

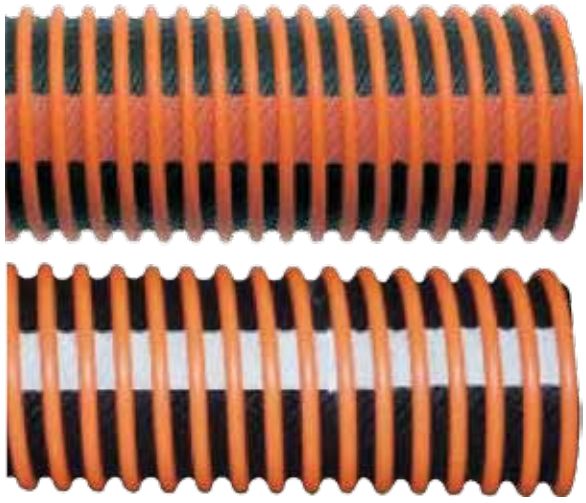
Reinforcement: Spiraled high tensile textile cords and double steel helix wire. For static grounding - use helix wires.

Cover: Smooth, black neoprene, oil and ozone resistant.

Lengths: Standard 100 ft., also cut and/or coupled to client’s individual requirements.

Couplings: Cam and Groove and combination nipples .

No. SP
PETROLEUM DROP HOSE



Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
SP-101-200	2”	2-7/8”	4”	1.08	100
SP-101-300	3”	3-7/8”	6”	1.49	100
SP-101-400	4”	4-7/8”	8”	2.11	100
SP-101-600	6”	7”	12”	3.20	100
SP-102-200	2”	2-7/8”	4”	1.08	100
SP-102-300	3”	3-7/8”	6”	1.49	100
SP-102-400	4”	4-7/8”	8”	2.11	100
SP-102-600	6”	7”	12”	3.20	100

Description: Ultra-lightweight flexible petroleum drop hose. Seamless static dissipating tube. This unique construction combines rubber and PVC to provide excellent vacuum capabilities and abrasion resistance. All-weather product is available with static wire for added protection (SP-102) or without (SP-101) static wire. Premium grade cover with external PVC helix provides superior oil, ozone, and abrasion resistance.

Tube: Seamless black nitrile, static conductive. Resistant to up to 60% Aromatics.

Reinforcement: Multiple plies of synthetic fabric, supported by a PVC helix.

Cover: One piece nitrile blend.

Temperature: -40°F to +150°F.

No. MSD
MATERIAL HANDLING SUCTION & DISCHARGE HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
MSD-300	3”	4-7/16”	15”	4.17	150
MSD-400	4”	5-5/16”	20”	4.91	150
MSD-600	6”	7-7/16”	30”	8.60	150
MSD-800	8”	9-9/16”	56”	11.42	150
MSD-1000	10”	11-3/8”	80”	13.44	150

Recommended For: All weather general purpose suction and transfer hose. Designed to handle abrasive material economically.

Tube: Black or red, smooth natural rubber.

Temperature & Range: -40°F to 158°F.

Reinforcement: High strength synthetic cord plus anti-static copper wire and embedded steel helix wire.

Cover: Black corrugated (wrapped finish), highly abrasion resistant synthetic cover.

Lengths: Standard 100 ft., 200 ft., and 40 ft. over 10” diameter, also cut and/or coupled to client’s individual requirements.

No. HTA
HOT TAR & ASPHALT DOCK HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
HTA-200	2”	2-11/16”	10”	1.48	150
HTA-300	3”	3-3/4”	15”	2.54	150
HTA-400	4”	4-13/16”	20”	3.32	150
HTA-400D	4”	5-1/4”	16”	5.20	200
HTA-600D	6”	7-1/2”	36”	9.05	200
HTA-800D	8”	9-9/16”	48”	13.29	200

Description: Black NBR, hot tar & asphalt resistant, suction and discharge hose. Recommended for hot tar, asphalt, hot oil, molten sulphur, and other unrefined petroleum products. Specially formulated elastomer allows this product to be used at temperatures exceeding 300°F. Dual helix design provides full vacuum capabilities. Seamless tube construction offers an ultra-smooth product contact surface. Durable, all-purpose cover is heat, oil, ozone, and abrasion resistant. Available in swaged end styles. Not recommended for refined petroleum products.

Tube: Seamless heat resistant NBR.

Reinforcement: Multiple plies of polyester with helix wire.

Cover: One piece black heat, ozone, and hot tar resistant CSM .

Temperature Rating: -25°F to +350°F

Lengths: 100 ft. and/or coupled to client’s individual requirements.

Part #’s ending with “D” are for Dock applications and rated for full vacuum.

No. DOSD
DOCK / OIL SUCTION & DISCHARGE HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
DOSD-300	3”	4-7/16”	15”	4.17	200
DOSD-400	4”	5-3/16”	16”	6.00	200
DOSD-600	6”	7-1/4”	36”	9.31	200
DOSD-800	8”	9-9/16”	48”	12.09	200
DOSD-1000	10”	11-15/32”	60”	20.05	200
DOSD-1200	12”	13-9/16”	72”	26.45	200

Description: Heavy duty, multi-purpose suction & discharge hose. Designed specifically for transferring petroleum products to and from tankers, barges and storage tanks. Exclusive construction allows for excellent flexibility and handling ease. Rugged all weather cover is resistant to oil, cuts, gouges, scuffs, and ozone attack. Available in smooth or corrugated construction with built-in or swaged end styles. Meets all Coast Guard regulations for Dock/ O.S. & D. hose.

Tube: Seamless nitrile blend. Resistant up to 50% aromatics.

Reinforcement: Multiple plies of polyester with helix wire.

Cover: Neoprene.

Temperature & Range: -40°F to 180°F.

Lengths: 100 ft. for sizes up to 8”; 50’ for sizes 10” & 12”, cut and/or coupled to client’s individual requirements.

No. MSSD
HOT MOLTEN SULPHUR SERVICE HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Weight LB/FT	Working Pressure-PSI
MSSD-600	6”	8”	42”	12.00	200
MSSD-800	8”	10-1/4”	54”	20.00	200
MSSD-1000	10”	12-1/4”	66”	28.00	200

Description: Heavy duty Molten Sulphur dock hose with a modified rough bore construction to handle 300°F. Heat and chemical resistant EPDM cover with a high grade EPDM tube.

Tube: Black EPDM tube.

Temperature & Range: -40°F to 300°F.

Reinforcement: Multiple plies of polyester tire cord with wire helix.

Cover: Black EPDM.

Lengths: 100 ft. for sizes up to 8”; 50 ft. for sizes 10”, cut and/or coupled to client’s individual requirements.

No. SS
MARINE EXHAUST HOSE

Part Number	ID	OD	# of plies	Wt lb/ft	WP PSI
SS-269-118	1-1/8”	1-9/16”	2	.52	200
SS-269-114	1-1/4”	1-13/16”	2	.75	200
SS-269-1516	1-5/16”	1-7/8”	2	.78	200
SS-269-138	1-3/8”	1-5/16”	2	.78	200
SS-269-112	1-1/2”	2-1/16”	2	.87	200
SS-269-158	1-5/8”	2-3/16”	2	.94	200
SS-269-134	1-3/4”	2-5/16”	2	1.02	200
SS-269-178	1-7/8”	2-7/16”	2	1.08	200
SS-269-200	2”	2-9/16”	2	1.11	200
SS-269-218	2-1/8”	2-11/16”	2	1.21	200
SS-269-214	2-1/4”	2-13/16”	2	1.26	200
SS-269-238	2-3/8”	2-15/16”	2	1.32	200
SS-269-212	2-1/2”	3-1/16”	2	1.45	200
SS-269-258	2-5/8”	3-3/16”	2	1.53	200
SS-269-234	2-3/4”	3-5/16”	2	1.58	200
SS-269-278	2-7/8”	3-7/16”	2	1.64	200
SS-269-300	3”	3-5/8”	4	1.52	200
SS-269-318	3-1/8”	3-3/4”	4	1.70	200

Part Number	ID	OD	# of plies	Wt lb/ft	WP PSI
SS-269-314	3-1/4”	3-7/8”	4	1.76	200
SS-269-312	3-1/2”	4-1/8”	4	1.78	200
SS-269-400	4”	4-5/8”	4	1.97	200
SS-269-418	4-1/8”	4-3/4”	4	1.98	200
SS-269-414	4-1/4”	4-7/8”	4	2.09	200
SS-269-412	4-1/2”	5-1/8”	4	2.22	200
SS-269-500	5”	5-15/16”	6	3.84	200
SS-269-5916	5-9/16”	6-1/2”	6	4.12	200
SS-269-600	6”	6-15/16”	6	4.65	200
SS-269-658	6-5/8”	7-9/16”	6	5.03	200
SS-269-700	7”	7-15/16”	6	5.31	200
SS-269-800	8”	8-15/16”	6	5.91	150
SS-269-858	8-5/8”	9-1/2”	6	6.94	150
SS-269-1000	10”	11”	6	7.83	150
SS-269-1034	10-3/4”	11-3/4”	6	8.40	100
SS-269-1200	12”	13”	6	9.03	100
SS-269-1234	12-3/4”	13-5/8”	6	9.46	100

Description: Premium grade, heavy duty marine exhaust hose. High pressure, multi-purpose product for use as a flexible connection to transfer wet exhaust. Tube resists high temperatures found in marine engine compartments. Durable cover is heat, ozone and abrasion resistant.

Tube: Black seamless nitrile blend.

Temperature & Range: -40°F to 200°F.

Reinforcement: Multiple plies of polyester.

Cover: Nitrile blend.

Lengths: Standard 12.5 ft., 25 ft., 50 ft., also cut and/or coupled to client’s individual requirements.

No. SB
SAND BLAST HOSE

Part Number	Inside Diameter	Outside Diameter	Weight LB/FT	Working Pressure-PSI
SB-050	1/2”	1-1/16”	.40	150
SB-075	3/4”	1-1/2”	.65	150
SB-100	1”	1-57/64”	1.00	150
SB-125	1-1/4”	1-11/64”	1.25	150
SB-150	1-1/2”	2-23/64”	1.30	150
SB-200	2”	2-7/8”	1.66	150

Description: Long lasting heavy duty hose available in 2 or 4 ply, exceptionally tough and abrasion resistant. Designed to convey abrasive sand and shot blast material.

Tube: Black natural rubber, static conductive.

Temperature & Range: -30°F to 185°F.

Reinforcement: High tensile textile cords.

Cover: Black synthetic rubber, abrasion and weather resistant, also pin pricked.

Lengths: Standard 50 ft., and 100 ft., also cut and/or coupled to client’s individual requirements.

Couplings: Sandblast couplings and nozzle holders attached with screws.

HOSE COUPLINGS

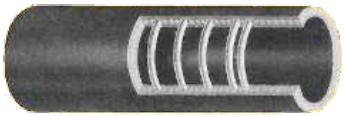
Accord personnel can apply various types of small and large diameter couplings to industrial hose and water suction. For use with straight ends.

Combination Nipple
For low or medium pressure service with water, material and water suction. For use with straight ends.

Shank
For low or medium pressure air, water, or general purpose in suction or discharge service.

Cam & Groove (Quick Disconnect)
For low or medium pressure water, petroleum and chemical transfer where fast connection Is desired.

Capped End
Hose end terminates with rubber cap to protect reinforcement from contamination that would cause hose to fail prematurely.



Soft End
Body wire reinforcement terminates short of hose end to create “Soft” end for ease of clamping to ensure sealed fit to couplings or pipe.

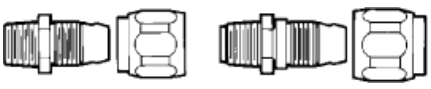
Rota-Lok End
End with either full floating flanges or split flanges. A superior design to the old style “Rolled Angle Ring” type beaded end. Tube extends through nipple and up face of stub end. Full flow unrestricted transition area.

Swage
This fitting consists of a stern & ferrule swaged to a hose. The ferrule is externally swaged for maximum holding power.

Modified Built-In Rubber Flanges (B.I.R.F.)
A superior design to the duck & rubber flange. Hose tube extends through nipple and up the face of the flange, offering a full flow unrestricted transition area.

Beaded Ends
Used where rubber seal/surface Is required when handling abrasive, corrosive or caustic materials.

Built-In Nipple Threaded End/150# ANSI Flange
Recommended on handbuilt hose for heavy duty suction or discharge service where a steel pipe is integrally built into the hose end. Pipe nipple can terminate in male pipe threads, victaulic groove, 150-300# ANSI fixed or floating flanges.



Re-Attachable Petroleum Transfer
For coupling fuel oil, tank truck, LP-gas hose and aircraft fueling hose.

CHEMICAL RESISTANCE GUIDE

The chemical guides in this section are offered as a general indication of the compatibility of the various materials used in Accord's rubber hose assemblies with the chemicals and fluids listed. The basis for the ratings in this guide include actual service experience, the advice of various polymer suppliers, and the considered opinion of our rubber chemists. When in doubt, a sample of the compound should always be tested with the particular chemical it is to handle. Some of the variables that come into play in the resistance of a compound to chemical attack are:

1. Temperature of the Material Transmitted:
Higher temperatures increase the effect of chemicals on rubber compounds. The increase varies with the polymer and the chemical. A compound quite suitable at room temperature might fail very quickly at higher temperatures.

2. Service Conditions:
A rubber compound usually swells when exposed to a chemical. With a given percent of swell, the hose tube may function satisfactorily if the hose is in a static condition, but fail quickly if the hose is subject to flexing.

3. The Grade or Blend of the Rubber Compound:
Basic rubber polymers are sometimes mixed or blended together to enhance a particular property for a specific service. The reaction to a particular chemical blend of polymers may, therefore, be somewhat different from the reaction to the single ones. When in doubt, a sample of the compound should always be tested with the particular chemical it is to handle.

KEY TO GENERAL CHEMICAL RESISTANCE CHART

Note: All data is based on 68°F (20°C) unless otherwise noted.
E = Excellent
G = Good
F = Fair
C = Conditional
I = Insufficient Data
X = Unsatisfactory
Blank = No Data

Common Name	ASTM Designation D1418-93	Composition	General Properties
Natural	NR	Isoprene Rubber (Natural)	Excellent physical properties, including abrasion resistance. Not oil resistant.
SBR	SBR	Styrene-Butadiene Rubber	Good physical properties, including abrasion resistance. Not oil resistant.
EPM or EPDM	EPDM	Ethylene-propylene-diene-terpolymer	Good general purpose polymer. Excellent heat, ozone and weather resistant. Not oil resistant.
Neoprene	CR	Chloroprene	Excellent weathering resistance. Flame retarding. Good oil resistance. Good physical properties.
BUNA-N or Nitrile	NBR	Nitrile-Butadiene	Excellent oil resistance. Good physical properties.
Hypalon	CSM	Chloro-sulfonated polyethylene	Excellent ozone, weathering and acid resistance. Good abrasion and heat resistance. Can be compounded for good oil resistance.
Cross Linked Polyethylene	XLPE	Cross Linked Polyethylene	Excellent resistance to most solvents, oils and chemicals. Do not confuse with chemical properties of standard polyethylene.
Butyl	IIR	Isobutene-Isoprene	Very good weathering resistance, low permeability to air. Good physical properties. Poor resistance to petroleum-based fluids.
UHMWPE	UHMWPE	Ultra-High Molecular Weight Polyethylene	Excellent resistance to majority of existing chemicals. Meets FDA requirements for foods and beverages.

Rubber Hose Chemical Resistance Chart

Key to general chemical resistance chart all data based on 68°F (20°C)

E=Excellent; G=Good; F=Fair; C=Conditional; I=Insufficient Data; X=Not Recommended; Blank=No Data

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Acetaldehyde	E	F	C	G	X		X	E	G
Acetic Acid, Glacial	G	X	X	G	C	X	X	E	E
Acetic Acid, 10%	E	F	F	E	X	F	F	E	G
Acetic Acid, 50%	E	X	X	E	X	G	X	E	E
Acetic Anhydride	E	G	G	E	X	F	X	E	G
Acetic Oxide	E		G			F	G	E	G
Acetone	E	X	F	E	X	C	C	E	E
Acetone Cyanohydrin	E		F			F	F	E	G
Acetophenone	E	X	X	E	X	X	X		
Acetyl Acetone	G	X	X	E	X	X	X	E	G
Acetyl Chloride	X	X	X	X	X	X	X	G	G
Acetyl Oxide	E		G			F	G	E	G
Acetylene	E	G	E	E	E	E	E	F	E
Acetylene Di-+Tera Chloride	X		X			X	X	G	G
Acrolein	E		G			G	F	E	G
Acrylenitrile	X	X	C	X	X	X	X	C	G
Acrylic Acid									G
Adipic Acid	E	G	E	G	G		G		
Air, +300°F		X	X	X	X	X	X		
Alk-Tri	X		X		X	X		E	I
Allyl Alcohol	E		E			E	E	E	E
Allyl Bromide	X		X			X	X	G	G
Allyl Chloride	F	X	X	X		X	X	G	G
Alum	E	E	E	E	E	E	E	E	E
Aluminium Acetate	G	G		E	F	X	X	E	E
Aluminium Chloride	E	E	E	E	E	E	E	E	E
Aluminium Fluoride	E	E	E	E	E	G	E	E	
Aluminium Formate	G		X			X	X	E	E
Aluminium Hydroxide		E	G		G	E			E
Aluminium Nitrate	E	E	E	E	E	E	E	E	
Aluminium Sulfate	E	E	E	E	E	E	E	E	E
Alumus-NH3-CR-K	E	E	E	E	E	E	E		
Amines-Mixed	G	G	X	G	X	G	G		
Aminobenzene									G
Aminoethano									E
Ammonium Carbonate	E	E		E	X	E	E		
Ammonium Chloride	E	E	E	E	E	E	E	E	E
Ammonium Hydroxide	E	E	G	E	X	X	X	E	E
Ammonium Nitrate	E	E	E	E	E		E	E	E
Ammonium Phosphate, Dibasic	E	E	E	E	E	E	E	E	E
Ammonium Sulphate	E	E	E	E	E	E	E	E	E
Ammonium Sulphite	E		E			E	E	E	E
Ammonium Thiosulfate	E		E			E	E	E	E
Amyl Acetate	E	X	X	X	X	X	X	E	E
Amyl Acetone	G		X			X	X	E	
Amyl Alcohol	E	G	E	E	X	E	E	E	E
Amyl Chloride	X	X	X	X		X	X	G	E
Amylamine	E		F			G	G		E
Anethole	X		X			X	X	G	F
Aniline	E	X	X	C	X	X	X	E	E
Aniline Dyes	G	G	G	G	X	G	G	E	G
Aniline Oil	G	X	X	G	X	X	X		G
Animal Fats	G	C	X	C	E	X	X	E	E
Antimony Pentachloride	X		X			X	X	E	E
Aqua Regia	X	X	C	C	X	X	X	G	G
Argon	G	X	X	E	C	X	X		
Arsenic Acid	E	E	E	E	E	E	E	E	E
Asphalt	X	X	X	X	X	X	X	X	X
ASTM Fuel A	X	E	G	X	E	X	X		
ASTM Fuel B	X	X	X	X	E	X	X		
ASTM Fuel C	X	X	X	X	G	X	X		
ASTM Oil No. 1	X	E	G	X	E	X	X	E	E
ASTM Oil No. 2	X	G	X	X	E	X	X	E	E
ASTM Oil No. 3	X	X	X	X	E	X	X	E	E
ASTM Oil No. 4	X	X	X	X	G	X	X		
Automatic Transmission Fluid	X	G	C	X	E	X	X		

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Banana Oil	C			C	X		X		
Barium Chloride	E	E	E	E	E	E	E	E	E
Barium Hydroxide	E	E	E	E	E	E	E	E	E
Barium Sulfide	E	E	E	E	E	E	E	E	E
Beer	E	G	E	G	C	E	E		
Beet Sugar Liquors	E	G	E	E	E	E	E		
Benzal Chloride	G							E	E
Benzaldehyde	E	X	X	E	X	X	X	E	E
Benzene	X	X	X	X	X	X	X	E	G
Benzine	X	G	X	X	E	X	X	E	E
Benzoic Acid	X	X	X	X	X	X	X	E	E
Benzol				X	X				G
Benzotrichloride								G	F
Benzyl Acetate	G		X			X	X	E	E
Benzyl Alcohol	X	C	F	X	X	X	X	E	E
Benzyl Chloride	G	X	C	G	X	C	C	E	E
Black Sulfate Liquor	E	G	G	E	G	G	G		E
Bleach	G	X	F	G	X	X	X	G	F
Borax Solution	E	E	E	E	C	G	G	E	
Boric Acid		E	E	E	E	E	E	E	
Brake Fluid (Hd-557)12 Days	G	G	G	E	C		E		
Brine	E	E	E	E	F	E	E	E	E
Bromacil				E					
Bromobenzene	X	X	X	X	X	X	X	C	G
Bromochlorometane	G	X	X	G	X	X	X	G	F
Bromotoluene	X		X			X	X	F	X
Bugdioxane								E	
Bunker Oil	X	X	X	X	E	X	E	E	G
Butadiene	X	X	C	X	X	X	X	E	
Butane	E	E	G	X	E	X	X	E	
Butanoic Acid									
Butanol (Butyl Alcohol)	E	E	E	G	E	E	E	E	E
Butanone					X			E	G
Butyl Acetate	G	X	X	C	X	X	X	E	E
Butyl Acrylate	X	X	X	X	X	X		G	G
Butyl Alcohol	E	E	E	E	E	E	E	E	E
Butyl Aldehyde	E					F		E	E
Butyl Benzyl Phthalate	E	X	X	E	C	X	X	E	E
Butyl Carbitol	E	C	C	E	X	X	X	C	E
Butyl Cellusolve	E	X	X	G	C	X	X	E	E
Butyl Chloride	F		X			X	X	G	G
Butyl Ether	C	X	X	C	C	X	X	E	E
Butyl Ether Acetaldehyde	E		X			X	X	E	E
Butyl Ethyl Ether	G		X			X	X	E	E
Butyl Oleate	G	X	X	G	X	X	X		
Butyl Phthalate	E		X			X	X	E	E
Butyl Stearate	X	X	X	X	G	X	X	E	E
Butylene	X	C	X	X	G	X	X		F
Butyraldehyde	E	X	X	G	X	X	X	E	E
Butyric Acid	F	X	X	G	X	F	X	E	E
Butyric Anhydride	F		G			F	X	E	E
Cadmium Acetate	G		X			X	X	E	E
Calcium Aluminate	E		E			E	E	E	E
Calcium Bichromate	E		F					G	F
Calcium Bisulfide		C		X	E				
Calcium Chloride	E	E	E	E	E	E	E	E	E
Calcium Hydroxide	E	E	G	E	E	E	G	E	E
Calcium Hypochlorite	G	X	F	E	X	X	X	C	G
Calcium Nitrate	E	E	E	E	E	E	E	E	E
Calcium Sulfide	E	E	E	E	G	E	E	E	E
Calcium Acetate	G	G	X	E	G	X	X	E	E
Caprylic Acid	F		G			F	X	E	E
Carbitol	F	G	X	G	G	X	X	E	E
Carbolic Acid Phenol	E	X	X	G	X	X	X	E	E
Carbon Dioxide	E	C	E	C	X	E	E	E	E
Carbon Disulfide	X	X	X	X	X	X	X	C	F

Rubber Hose Chemical Resistance Chart

Key to general chemical resistance chart all data based on 68°F (20°C)

E=Excellent; G=Good; F=Fair; C=Conditional; I=Insufficient Data; X=Not Recommended; Blank=No Data

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Carbon Monoxide	E	C	E	C	E	E	G	E	
Carbon Tetrachloride	X	X	X	X	X	X	X	G	G
Carbon Acid	E	X	E	G	X	E	E	E	E
Castrol Oil	E	E	E	G	E	F	G	E	
Caustic Soda (See Sodium Hydroxide)									E
Cellosolve Acetate	E	X	X	G	X	X	X	E	E
Celluguard	E	E	E	G	E	E	E		
China Wood Oil (Tung Oil)	C	G	X	X	E	X	X		
Chlorinated Solvents	X	X	X	X	X	X	X	G	G
Chloroacetic Acid	F	X	X	X	X	X	X	E	E
Chloroacetone	G	X	X	E	X	X	X	E	E
Chlorobenzene	X	X	X	X	X	X	X	G	G
Chlorobutane	F		X			X	X	G	F
Chlorodane				E	E				
Chlorothyl Benzene	X		X			X	X	E	E
Chloroform	X	X	X	X	X	X	X	G	G
Chloropentane	X		X			X	X	E	E
Chlorosulfonic Acid	X	C	X	X	X	X	X	G	X
Chlorotoluene	X	X	X	X	X	X	X	G	G
Chlorox	G	G	G	G	G	X	X		
Chrome Plating Solutions	X	X	X	G	X	X	X		
Chromic Acid	F	X	G	C	X	X	X	G	G
CIS-9-Octadecenoic Acid	G		X			X	X	E	
Citric Acid	E	E	E	E	E	E	E	E	
Coal Oil	X		X	X	X	X	X	E	E
Coal Tar	X	G	X	X	E	X	X	E	E
Coal Tar Naphtha	X		X			X	X	E	E
Coconut Oil	G	G	X	C	E	X	X	E	
Coke Oven Gas	X	X	X	X	X	X	X	E	
Coolanol (Monsanto)		E	G	X	E	X	X		
Copper Chloride	E	C	E	E	C	F	E	E	E
Copper Cyanide	E	E	E	E	E	E	E	E	
Copper Hydrate	E		G			F	G	E	E
Copper Hydroxide	E		G			F	G	E	E
Copper Sulfate	E	E	E	E	E	F	E	E	E
Corn Oil	E	C	X	C	E	X	X	E	
Cottonseed Oil	C	C	X	C	C	X	X	C	G
Creosote	X	C	X	X	C	X	X	E	E
Cresols	X	X	X	X	X	X	X	E	E
Cresylic Acid	X	X	X	X	X	X	X	E	E
Crotonaldehyde	E		X			X	X	E	E
Crude Oil	X	X	X	X	G	X	X	E	E
Cumene	X	X	X	X	X	X	X	E	E
Cupric Carbonate	E		E			F	E	E	E
Cupric Nitrate	E		E			F	E	E	E
Cupric Sulfate	E		E			F	E	E	E
Cutting Oil	X	G	G	X	E	X	X		
Cyclohexane	X	X	X	X	G	X	X	G	E
Cyclohexanol	X	G	X	X	C	X	X	E	E
Cyclohexanone	X	X	X	X	X	X	X	E	E
Cyclopentane	X		X			X	X	E	E
Cyclopentanol	X		X			X	X	E	E
Cyclopentanone	X		X			X	X	E	E
DDT In Kerosene	X	F	X	X	E	X	X	E	E
Decalin	X	X	X	X	X	X	X	E	X
Decyl Alcohol	E		E			E	E	E	E
Decyl Aldehyde	E		X			X	X	E	E
Decyl Butyl Phthalate	E		X			X	X	E	E
Detergent, Water Solution	E	G	G	E	E	G	G		
Developing Fluid (Photo)	G	E	E	G	E	E	G		
Dextron	X	G	X	X	E	X	X		
Di-Iso-Butylene	X	X	X	X	G	X	X	E	
Di-Iso-Propanolamine	E								
Di-Iso-Propyl Ether	F		X			X	X	E	
Di-Iso-Propyl Ketone	G	X	X	E	X	X	X	E	
Diacetone Alcohol	E	X	X	X	X	X	X	C	E

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Diamyl Naphthalene	E		X			X	X	E	
Diamylamine	E		G			F	G		E
Diamylene	X		X			X	X	E	E
Diamylphenol	X		X			X	X	E	E
Dibenzyl Ether	E	X	X	X	X	X	X	E	E
Dibromobenzene	X		X			X	X	E	G
Dibutyl Ether	G	X	X	C	X	X	X	E	E
Dibutyl Phthalate	C	X	X	C	X	X	X	E	E
Dibutyl Sebacate	E	X	X	G	X	X	X	E	E
Dibutylamine	X	X	X	X	X	X	X		E
Dicalcium Phosphate	E		E			E	E	E	E
Dichloro Ethylene									F
Dichloroacetic Acid	F		X			G	X	E	E
Dichlorobenzene	X	X	X	X	X	X	X	G	G
Dichlorobutane	X	X	X	X	G	X	X	E	E
Dichlorodifluoromethane	X		X			X	X		I
Dichloroethane	X		X			X	X	E	E
Dichloroethyl Ether	X		X			X	X	E	E
Dichlorohexane	X		X			X	X	E	E
Dichloromethane	X		X			X	X	E	E
Dichloropentane	X		X			X	X	E	E
Dichloropropane	X		X			X	X	E	E
Dichloropropene								E	
Diesel Oil	X	C	C	X	E	X	X	C	E
Diethanol Amine	E		F			G	G		E
Diethylbenzine	X	X	X	X	X	X	X	E	E
Diethyl Ether	X	C	X	X	X	X	X	E	
Diethyl Ketone	G		X			F	X	E	E
Diethyl Oxalate	E		X			E	E	E	E
Diethyl Phthalate	E	X	X	G		X	X	E	E
Diethyl Sebacate	E	X	X	C	X	X	X		E
Diethyl Sulfate									E
Diethylamine	E	C	C	G	C	G	G	C	E
Diethylene Glycol	E	E	E	E	E	E	E	C	E
Diethylenetriamine	E		F			G	G		E
Diethyltriamine	E		F			G	G		E
Dihydroxydiethyl Ether	E		E			E	E		E
Diisobutyl Ketone	G	X	X	G	X	X	X	E	E
Diisodecyl Phthalate	E		X			X	X	E	E
Diisooctyl Adipate	E		X			X	X	E	E
Diisooctyl Phthalate	E		X			X	X	E	E
Dimethyl Carbinol									E
Dimethyl Ketone									E
Dimethyl Phthalate	G	X	X	G	X	X	X	E	E
Dimethyl Sulfate									E
Dimethyl Sulfide									G
Dimethylamine								E	E
Dimethylaniline	C	C	X	G	C		C		
Dimethylbenzene									E
Dioctyl Adipate									E
Dioctyl Phthalate	E	X	X	C	C	X	X	E	E
Dioxalane	C	X	X	G	X	X	X	E	E
Dioxane	G	X	X	G	X	X	X		E
Dipentene	X	X	X	X	G	X	X		
Dipropylamineolamine	E		G			G	G		E
Dipropylene Glycol	E		E			E	E		E
Disodium Phosphate	E		E			E	E	E	E
Divinyl Benzene	X		X			X	X	E	E
Dowtherm, A and E	X	X	X	X	X	X	X	E	E
Dry Cleaning Fluids	X	X	X	X	C		X		
Ducgkirioebaane	X								
Durd AW-16,31				X	E				
Duro FR-HD				X	E				
Ethanol(Grain Alcohol)	E	E	E	E	C	E	E	E	E
Ethanolamine	E	G	C	E	G	G	G	C	E
Ethers	X	X	X	C	X	X	X		

Rubber Hose Chemical Resistance Chart

Key to general chemical resistance chart all data based on 68°F (20°C)

E=Excellent; G=Good; F=Fair; C=Conditional; I=Insufficient Data; X=Not Recommended; Blank=No Data

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Ethyl Acetate	G	X	X	C	X	X	X	E	E
Ethyl Acetoacetate	G	X	X	G	X	X	X	E	E
Ethyl Acrylate	G	X	X	G	X	X	X	G	E
Ethyl Alcohol	E	E	E	E	C	E	E	E	E
Ethyl Aldehyde	E					F		E	E
Ethyl Aluminium Dichloride	X		X			X	X	G	F
Ethyl Benzene	X	X	X	X	X	X	X	E	E
Ethyl Bromide	X	X	X	X	G	X			
Ethyl Butyl Acetate	G		X			X	X	E	E
Ethyl Butyl Alcohol	E		E			E	E	E	E
Ethyl Cellulose	G	G	G	G	G	G	G	E	
Ethyl Chloride	F	X	X	X	X	X	X	G	G
Ethyl Dichloride	X		X			X	X	G	G
Ethyl Diisobutylthio-Cabarmate						E	E		
Ethyl Ether	C	X	X	X	C	X	X	E	E
Ethyl Formate	G	G	X	G	X	X	X	E	E
Ethyl Iodide	X		X			X	X	G	F
Ethyl Oxalate	X	X	X	X	X	X	X	E	E
Ethyl Phthalate									E
Ethyl Silicate	E	E	G	E	E	F	F	E	E
Ethyl-N-Butyl Ketone	G		X			X	X	E	E
Ethyl-1-Butanol	E		E			E	E	E	E
Ethylamine	G		F			F	F		E
Ethylene Chlorohydrin	G	C	G	C	X	G	G	E	G
Ethylene Diamine	E	E	F	E	E	G	G	E	E
Ethylene Dibromide	X	X	X	C	X	X	X	G	F
Ethylene Dichloride	X	X	X	X	X	X	X	G	G
Ethylene G. Monoethyl E Acetate							E		
Ethylene G. Monobutyl Ether								E	
Ethylene G. Monoethyl Ether								E	
Ethylene G. Monoehexil Ether								E	
Ethylene Glycol	E	E	E	E	E	E	E	C	E
Ethylene Oxide	C	X	X	C	X	X	X		E
Fatty Acids	X	C	X	X	C	X	X	E	G
Ferric Bromade	E		E			E	E	E	E
Ferric Chloride	E	G	E	E	E	E	E	E	E
Ferric Nitrate	E	E	E	E	E	E	E	E	
Ferric Sulfate	E	E	E	E	E	E	E	E	E
Ferrous Acetate	G		X			X	X	E	E
Ferrous Chloride	E	E	E	E	E	E	E	E	E
Ferrous Sulfate	E	E	E	E	G	E	E	E	E
Fluoboric Acid	E	C	E	E	C	E	G	C	G
Fluorine	C	X		X	X	X	X	X	X
Fluosilicic Acid	E	C	E	E	C	E	C	C	G
Formaldehyde	E	C	C	G	X	G	C	E	E
Formalin	E		E			G	G	E	E
Formic Acid	E	C	F	E	X	G	G	C	E
Freon SO2		E		E					
Freon 113		E	E	C	E	C	G		
Freon 12	X	G	X	X	G	X	X	C	E
Freon 22	F	X	X		X	X	X	C	E
Fuel A (ASTM)	X	G	X	X	E	X	X	G	G
Fuel B (ASTM)	X	F	X	X	E	X	X	G	G
Fuel Oil	X	G	C	X	E	X	X	C	E
Furan	X	X	X	C	X	X	X		
Furfural	E	X	X	C	X	X	X	E	E
Furfuran		X	X	C	X	X	X		
Furfuryl Alcohol	F	X	X	G	X	X	X	E	E
Gallic Acid	G	X	C	G	C	E	C	C	E
Gas, High Octane		X		X	G				
Gasoline	X	X	X	X	E	X	X	E	G
Glacial Acrylic Acid								E	
Gluconic Acid	F		G			X	X	E	E
Glucose	E	G	E	G	G	E	E	E	G
Glycerine	E	E	E	E	E	E	E	C	E
Glycerol	E	E	E	E	E	E	E		

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Glycols	E	E	E	E	E	E	E	E	G
Grease	X	X	X	X	E	X	X	G	E
Green Sulphate Liquor	E	G	E	E	G	E	E	E	E
Halon 1211		E			E				
Helium	E	E	E	E	E	E	E		
Heptanal	E		X			X	X	E	E
Heptane	X	G	X	X	E	X	X	G	E
Heptane Carboxylic Acid									E
Hexaldehyde	G	E	C	E	X	X	X	E	E
Hexane	X	C	X	X	C	X	X	G	G
Hexanol	E		E			E	E	E	E
Hexene	X	G	G	X	G	X	X	E	G
Hexyl Alcohol	C	G	C	C	E	E	E	E	E
Hexyl Methyl Ketone	G		X			X	X	E	E
Hexylamine	E		F			G	G		E
Hexylene Glycol	E		E			E	E		E
Hydraulic & Motor Oil	X	C	G	X	E	X	X	E	
Hydrazine	E	G	E	X	X	X			
Hydrobromic Acid	E	X	E	E	X	E	X	C	G
Hydrochloric Acid	F	X	X	X	X	E	X	E	E
Hydrocianic Acid	E	E	C	C	C	X			
Hydrofluoric Acid	E	X	E	X	X	X	X	C	E
Hydrofluosilicic Acid	E	C	E	E		X			G
Hydrogen Dioxide (10%)	F					X	X		G
Hydrogen Gas	E	E	G	E	E	G	G	E	E
Hydrogen Peroxide Over 10%	X	X	X	X	X	X	X	C	F
Hydrogen Peroxide 10%	F	F	F	F	X	X	X	C	G
Hydrogen Sulfide (Wet)	E	C	X	E	X	X	X	E	G
Hyvar VXL				E					
Iodine	C	X	E	C	C	C	C	C	E
Iodine Pentafluoride	X	X	X	X	X	X	X		
Iodoform		X		X	E	X	X		
Iso-Butanal									E
Iso-Butylamine									E
Iso-Butylbromide									G
Iso-Butylcarbinol									E
Isocyanates								E	E
Isooctane	X	C	X	X	E	X	X	E	G
Isophopyl Acetate	G	X	X	X	X	X	X	E	E
Isophopyl Alcohol	E	C	E	E	C	E	E	E	E
Isopropyl Ether	X	X	C	X	C	X	X	E	E
Jet Fuels	X	G	X	X	E	X	X	E	E
JP-4 Oil	X	X	X	X	G	X	X		
Kerosene	X	C	X	X	E	X	X	E	E
Ketones	E	X	X	E	C	X	X		
Lacquer Solvents	X	X	X	X	X	X	X	G	
Lactic Acid - Cold	E	E	G	X	X	G	G	C	
Lactic Acid - Hot		X	C	X	X	X	X		
Lard	X	C	X	X	E	X	X	C	
Lavender Oil	X	X	X	X	G	X	X	G	
Lead Acetate	G	G	X	E	G	E	X	E	E
Lead Nitrate	E	E	X	E	E	E	E		
Lead Sulfate		E	E	E				E	E
Lime		C		G	X				
Lime Bleach	E	G	G	E	E	E	G		
Lime Sulfur	E	E	E	E	X	X	X	E	
Linoleic Acid	X	X	X	X	G	X	X		
Linseed Oil	C	C	C	X	E	X	X	C	E
Liquid Petroleum Gas (LPG)	X	G	X	X	E	X	X	E	X
Lubricating Oil	X	C	F	X	G	X	X	E	E
Lye Solutions	E	G	E	E	G	G	G		G
MEK	G	X	X	E	X	X	X	E	G
Magnesium Acetate	G							E	E
Magnesium Chloride	E	E	E	E	E	E	E	E	E
Magnesium Hydrate	E		G			E	G	E	E
Magnesium Hydroxide	E	G	G	E	G	E	G	E	E

Rubber Hose Chemical Resistance Chart

Key to general chemical resistance chart all data based on 68°F (20°C)

E=Excellent; G=Good; F=Fair; C=Conditional; I=Insufficient Data; X=Not Recommended; Blank=No Data

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Magnesium Sulfate & Sulphite	E	E	E	E	E	E	E	E	E
Maleic Acid	X	X	X	X	X	X	X	G	E
Maleic Anhydride	X	X	X	X	X	X	X		
Malic Acid	X	C	G	X	C	C	C	C	G
MAPP		E		G	E		G		
Mercury	E	E	E	E	E	E	E	E	
Mercury Vapors	E	E	E	E	E	E	E		
Mesityl Oxide	G	X	X	G	X	X	X	E	E
Methallyl Alcohol	E		E			E	E	E	E
Methane Carboxylic Acid		G		X					
Methanol (Methyl Alcohol)	E	E	E	E	E	E	E		E
Methanol (Wood Alcohol)	E	E	E	E	E	E	E	E	E
Methyl Acetate	G	X	X	E	X	X	X	E	E
Methyl Acetoacetate	G	X	X	G	X	X	X	E	E
Methyl Acetone	G		X			F	X	E	E
Methyl Acetylene Propadiene		E		G	E		G		
Methyl Allyl Chloride	F		X			X	X	G	E
Methyl Amyl Carbinol	E		E			E	E	E	E
Methyl Benzene	X		X			X	X	E	E
Methyl Bromide	X	X	X	X	C	X	X	G	
Methyl Butyl Alcohol									E
Methyl Butyl Ketone	G	X	X	E	X	X	X		E
Methyl Carbitol	F		X			X	X	E	E
Methyl Cellosolve	E	C	X	G	C	X	X		E
Methyl Chloride	C	X	X	X	X	X	X	G	E
Methyl Ethyl Ketone	G	X	X	E	X	X	X	E	E
Methyl Hexanol	E		E			E	E	E	E
Methyl Methacrilate	X	X	X	C	X	X	X	G	G
Methyl Normal Amyl Ketone	G		X			X	X	E	E
Methyl Propyl Ether	G		X			X	X	E	E
Methyl Salycilate	G	X	X	G	X	C	C		
Methyl Tertiary Metyl Ether	G	X			X		X		
Methyl-2-Butanol	E		E			E	E	E	
Methyl-2-Butanone	G		X			X	X	E	
Methyl-2-Hexanone	G		X			X	X	E	
Methylallyl Acetate	G		X			X	X	E	
Methylamyl Alcohol	E		E			E	E	E	E
Methylcycloexane	X		X			X	X	G	E
Methylene Bromide									G
Methylene Chloride	X	X	X	X	X	X	X	G	G
Methylethyl Ketone	G	X	X	E	X	X	X	E	
Methylexyl Ketone	G		X			X	X	E	
Methylisobutyl Carbinol	E	G	C	E	G	G	G	C	E
Methylisobutyl Ketone	C	X	X	C	X	X	X	E	E
Methylisopropyl Ketone	G	X	X	X	X	X	X	E	E
Methylpropyl Carbinol	E		G			G	G	E	E
Methylpropyl Ketone	G		X			X	X	E	E
MIL-A-6091	E	E	E	E	G	E	E		
MIL-C-4339	X	X	X	X	E	X	X		
MIL-C-7024	X	X	X	X	E	X	X		
MIL-E-9500	E	E	E	E	E	E	E		
MIL-F-16884	X	C	C	X	E	X	X		
MIL-F-17111	X	G	X	X	E	X	X		
MIL-F-25558 (RJ-1)		G		X	E				
MIL-G-10924	X	X	G	X	E	X	X		
MIL-G-25013	X	G	G	X	E	X	X		
MIL-G-25537		G		X	E				
MIL-G-3545	X	G	C	X	E	X	X		
MIL-G-5572	X	X	X	X	E	X	X		
MIL-G-7711	X	X	X	X	E	X	X		
MIL-H-05606 (HFA)		G		X	E				
MIL-H-13910	G	E	G	E	E	G	E		
MIL-H-19457	E	X	X	E	X	X	X		
MIL-H-22251	E	G	G	E	G		G		
MIL-H-27601		G		X	E				
MIL-H-5606 (J43)		G		X	E				

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
MIL-H-6083	X	E	G	X	E	X	X		
MIL-H-8446 (MLO-8515)	X	E		X	G	X	X		
MIL-J-5161	X	X	X	X	G	X	X		
MIL-J-5624 (JP-3,JP-4,JP-5)	X	X	X	X	E	X	X		
MIL-L-15016	X	G	G	X	E	X	X		
MIL-L-17331	X	G	G	X	E	X	X		
MIL-L-2104	X	G	C	X	E	X	X		
MIL-L-21260	X	G	G	X	E	X	X		
MIL-L-23699	X	C	C	X	G	X	X		
MIL-L-25681		G		E	G				
MIL-L-3150	X	G	G	X	E	X	X		
MIL-L-4343	C	E	G	C	E	X	X		
MIL-L-6082	X	G	G	X	E	X	X		
MIL-L-6085	X	X	X	X	G	X	X		
MIL-L-7808	X	X	X	X	G	X	X		
MIL-L-7870	X	G	X	X	E	X	X		
MIL-L-9000	X	G	C	X	E	X	X		
MIL-L-9236	X	X	X	X	G	X	X		
MIL-P-27402		G		E	G				
MIL-R-25567 (RP-1)			X						
MIL-S-3136 Type 1 Fuel	X	G	C	X	E	X	X		
MIL-S-3136 Type 2 Fuel	X	X	X	X	G	X	X		
MIL-S-3136 Type 3 Fuel	X	X	X	X	G	X	X		
MIL-S-3136 Type 4 Oil, Lowswell	X	E	E	X	E	X	X		
MIL-S-3136 Type 5 Oil, Medswell	X	G	G	X	E	X	X		
MIL-S-3136 Type 6 Oil, Hi Swell	X	X	X	X	E	X	X		
MIL-S-81087		E		E	E				
Mineral Oil	X	C	F	X	E	X	X	E	
Mineral Spirits	X	F	X	X	E	X	X	E	E
Mobile HFA				X	E				
Molten Sulfur	G		F			X	X	X	
Mono-Chloroacetic Acid	F		X			G	X	E	E
Monobutyl Ether	F		X			X	X	E	
Monochlorobenzene	X	X	X	X	X	X	X	G	G
Monochlorodifluoromethane	F		X			X	X	C	I
Monoethanol Amine	E	X	X	E	X	E	X	E	E
Monoethyl Amine	G		F			F	F	C	E
Morpholine				X	X				
MTBE	G	X			X		X		F
Muriatic Acid	F	X	X	F	X	E	X	E	E
N-Butylamine	X	X	X	X	C	X	X		
N-Butylbenzene	X		X			X	X	E	
N-Butylbromide	X		X			X	X	G	
N-Butylbutyrate	F		X			X	X	G	
N-Octane	X	G	X	X	G	X	X	G	
N-Serv (75% Xylene)								C	
NA-K				X	X				
Naphtha	X	X		X	C	X	X	E	E
Naphthalene	F	X	X	X	X	X	X	E	E
Naphthenic Acid		X	X	X	G	X	X		
Natural Gas	X	E	F	X	E	X	X	C	
Neohexane	X		X			X	X	E	E
Neon Gas	E	E	E	E	E	E	E		
Neu-Tri	X		X			X	X	E	E
Nickel Acetate	E	G	X	E	G	E	X	E	
Nickel Chloride	E	G	E	E	E	E	E	E	E
Nickel Nitrate	E	E	E	E		E	E	E	E
Nickel Sulfate	E	E	E	E	E	E	E	E	E
Nietylene						E			
Nitric Acid, Conc (16N)	C	X	G	X	X	X	X	G	
Nitric Acid, Red Fuming	G	X	X	X	X	X	X	X	X
Njtric Acid,10%	G	X	X	C	X	X	X	C	E
Nitric Acid, 20%	G	X	X	G	X	X	X	E	E
Nitric Acid, 30%	F	X	X	C	X	X	X	E	G
Nitric Acid, 30% - 70%	F	X	F	F	X	X	X	G	F
Nitrobenzene	F	X	X	X	X	X	X	E	E

Rubber Hose Chemical Resistance Chart

Key to general chemical resistance chart all data based on 68°F (20°C)

E=Excellent; G=Good; F=Fair; C=Conditional; I=Insufficient Data; X=Not Recommended; Blank=No Data

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Nitroethane	G	C	G	G	X	G	G	E	
Nitrogen	E	E	E	E	E	E	E	E	E
Nitromethane	G	C	C	G	X	G	C	E	
Nitrous Oxide Gas									E
Nuto H				X	E				
Nyvac Light				E	X				
Octanol	E		G			G	G	E	E
Octyl Acetate	G		X			X	X	E	E
Octyl Alcohol	E	G	E	C	G	E	E	E	E
Octyl Aldehyde	E		X			X	X	E	E
Octyl Amine	E		F			G	G	C	E
Octyl Carbinol	E		E			E	E	E	E
Octylene Glycol	E		E			E	E	C	E
Oil-Petroleum	X	G	F	X	E	X	X	E	G
Oleic Acid	G	X	X	X	C	X	X	E	E
Oleum (Fuming Sulfuric Acid)	X	X	X	X	C	X	X	X	X
Olive Oil	E	E	F	E	E	X	X	C	
Ortho-Dichlorobenzene	X	X	X	X	X	X	X	G	E
Ortho-Dichlorobenzol	X		X			X	X	G	E
Orthoxylene	X		X			X	X	E	G
Oxalic Acid	E	X	X	E	X	X	X	C	E
Ozone	G	C	G	E	X	X	X	C	E
P-Cymene	X	X	X	X	X	X	X	E	
Paint Thinner	X	X	X	X	X	X	X		
Palmitic Acid	E	C	C	C	E	X	X	C	E
Papermakers Alum	E	E	E	E	E	E	E	E	E
Para-Dichlorobenzene	X	X	X	X	X	X	X	G	
Paraffin Wax	X	G	X	X	E	X	X	X	E
Paraldehyde	E					F		E	E
Paraxylene	X		X			X	X	E	E
Pelargonic Alcohol	E		X			X	X	E	
Pentachloroethane	X		X			X	X	E	E
Pentane	X	G	F	X	E	X	X	G	G
Pentanol									E
Pentanone	G		X			X	X	E	E
Pentasol	E	E	E			E	E	E	
Perchloric Acid - 2N	G	C	G	C	X	X	X	E	
Perchloroethylene	X	X	X	X	X	X	X	G	G
Petroleum Crude	X	G	X	X	E	X	X	E	E
Petroleum Ether	X		X	X	G	X	X	E	E
Petroleum Oils	X	G	X	X	X	X	X	E	E
Phenol	E	X	X	X	X	X	X	E	E
Phenolsulfonic Acid	F		X			X	X	G	F
Phenylamine									G
Phenylchloride	X		X			X	X	E	E
Phosphate Esters				E	X				
Phosphoric Acid 10%	E	X	E	X	X	E	E	E	E
Phosforic Acid 10%-85%	G	X	E	X	X	G	X	E	E
Phosphorus Trichloride	E	X	X	E	X	X	X		
Piric Acid, H2O Solution		C	G	X	X	G	G		
Pine Oil	X	X	X	X	X	X	X	E	E
Pinene	X	F	X	X	G	X	X	E	E
Polyethylene Glycol E-400	E		E			E	E		E
Polyol Ester	X	X		X	G	X			
Polypropylene Glycol	E		E			E	E		E
Potassium Acetate	G	G	X	E	G	X	X	E	E
Potassium Bisulfate	E		E			E	E	E	E
Potassium Bisulfite	E		E			E	E		E
Potassium Carbonate	E	E	E	E		E	E	E	E
Potassium Chloride	E	E	E	E	E	E	E	E	E
Potassium Chromate	E		F					G	G
Potassium Cyanide	E	E	E	E	E	E	E	E	
Potassium Dichromate	E	E	F	E	E	G	G	G	G
Potassium Hydrate	E		G			E	G	E	E
Potassium Hydroxyde	E	C	G	E	X	E	G	E	G
Potassium Nitrate	E	E	E	E	E	E	E	E	E

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Potassium Silicate	E		E			E	E	E	E
Potassium Sulfate	E	E	E	E	E	E	E	E	E
Potassium Sulfide									E
Potassium Sulfite	E	E	E	E		E	E	E	E
Prestone Antifreeze		E		E	E				
Producer Gas	X	G	G	X	E	X	E		
Propane	X	C	G	X	E	X	X	E	
Propanediol	E		E			E	E		E
Propanetriol									
Propanol	E		E			E	E	E	E
Propanolamine									E
Propionic Acid				E	X			E	
Priopionitrile		G		X	E				
Propyl Acetate	G	X	X	G	X	X	X	E	E
Propyl Alcohol	E	E	E	E	E	E	E	E	E
Propyl Aldehyde	E					F		E	E
Propyl Benzene									E
Propyl Chloride	F		X			X	X	G	G
Propyl Nitrate	G	X	X	G	X	X	X		
Propylene	X	X	X	X	X	X	X		
Propylene Diamine	E		F			G	G		E
Propylene Glycol	E		E			E	E		E
Pydraul, 'E' Series		X	X	E	X	X	X	E	
Pydraulic 'C'		X		X	X				
Quintolubric 822 Series	X	X		X	G	X			
Red Oil	X	G	G	X	E	X	X		
Refrigerant 11		X		X	G				
Refrigerant 12		G		X	E				
Refrigerant 22		G		X	X				
Resorcinol					X				
SAE No. 10 Oil		C	X		G				
Sal Ammoniac	E	E	E	E	E	E	E		
Sea Water	E	G	E	E	E	E	E	E	E
Sewage	F	E	E	F	E	F	F	E	E
Silicate Esters	X	E	E	X	G	X	X		
Silicate Of Soda	E		E			E	E	E	E
Silicone Grease	E	E	E	E	E	E	E		
Silicone Oil	E	E	E	E	E	E	E		
Silver Nitrate	E	E	E	E	G	E	E	E	
Skydrol 500 Type 2		X	X	E	X				
Skydrol 500B	G	X	X	E					
Skydrol 500C	G	X	X						
Skydrol 7000 Type 2		X		E	X				
Soap Solutions	E	G	E	E	E	G	E	E	E
Soda Ash	E	E	E	E	E	E	E	E	E
Soda Lime	E		G			E	G	E	E
Soda Niter	E		E			E	E	E	E
Sodium Acetate	G	G	X	E	G	X	X	E	E
Sodium Aluminate	E		E			E	E	E	E
Sodium Bicarbonate	E	E	E	E	E	E	E		
Sodium Bisulfate	F	E	E	E	E	F	F	E	E
Sodium Bisulfite	E	E	E	E	E	E	E	C	E
Sodium Borate	E	E	E	E	E	E	E	E	
Sodium Carbonate	E	E	E	E	E	E	E	E	E
Sodium Chloride	E	E	E	E	E	E	E	E	E
Sodium Cyanide	E	E	E	E	E	E	E	E	
Sodium Dichromate	E	C	F	E	C	C	C	G	E
Sodium Hydrate	E		G			E	G	E	E
Sodium Hydrochlorite	G	X	F	G	X	X	X	G	E
Sodium Hydroxide (Caustic Soda)	E	G	G	E	X	E	G	E	E
Sodium Hypochlorite	G	X	F	G	G	X	X	G	G
Sodium Metaphosphate	E	G	G	E	E	E	E	E	
Sodium Nitrate	E	G	E	E	G	E	E	E	E
Sodium Perborate	E	G	G	E	G	G	G	E	
Sodium Peroxide	E	G	G	E	G	G	G	E	
Sodium Phosphate	E	G	E	E	E	E	E	E	

Rubber Hose Chemical Resistance Chart

Key to general chemical resistance chart all data based on 68°F (20°C)

E=Excellent; G=Good; F=Fair; C=Conditional; I=Insufficient Data; X=Not Recommended; Blank=No Data

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Sodium Silicate	E	E	E	E	E	E	E	E	E
Sodium Sulfate	E	E	E	E	E	E	E	E	E
Sodium Sulfide	E	E	E	E	E	E	E	E	E
Sodium Sulfite	E	E	E	E	E	E	E	E	E
Sodium Thiosulfate	E	E	E	E	G	E	E	E	E
Soybean Oil	E	G	G	C	E	X	X	E	G
Stannic Chloride	E	X	E	E	E	E	E	E	E
Stannic Sulfide	E		E			E	E	E	E
Stannous Chloride	E	E	E	E	E	E	E	E	E
Stannous Sulfide	E		E			E	E	E	E
Steam, Below 350 Deg F	G	X	X	E	X	X	X	X	
Stearic Acid	G	G	X	G	G	X	X	E	E
Stoddard Solvent	X	G	X	X	E	X	X	E	E
Styrene	X	X	X	X	X	X	X	G	G
Sulfamic Acid	E	G	G	E	G	G	G	C	F
Sulfur	F	X	F	F	X	X	X	X	
Sulfur Chloride	X	C	G	X	C	X	X	E	
Sulfur Dioxide	G	X	G	G	X	C	C	C	G
Sulfur Trioxide, Dry	G	X	X	G	X	G	G	G	
Sulfuric Acid 60% (200F)									G
Sulfuric Acid, Conc.	X	X	E	X	X	X	X	E	X
Sulfuric Acid, Fuming	X	X	X	X	X	X	X	X	X
Sulfuric Acid, 25%	E	X	X	E	X	G	X	E	E
Sulfuric Acid, 25%-50%	E	X	X	E	X	G	X	E	G
Sulfuric Acid, 50%-96%	X	X	G	X	X	X	X	E	G
Sulfurous Acid, 10%	E	X	E	G	X	E	G	E	E
Sulfurous Acid, 10%-85%	E	X	E	G	X	E	X	E	E
Sutan								E	
T-Butyl Amine			X	G					
Tall Oil	X	G	X	X	E	X	X	C	E
Tallow	X	G	X	X	E	X	X	C	E
Tannic Acid	E	G	E	E	E	E	F	C	E
Tar	X	G	X	X	X	X	X	X	X
Tar Bituminous	X	C	X	X	G	X	X		
Tartaric Acid	E	G	E	G	E	C	X	C	E
Telone 2								E	
Tertiary Butyl Alcohol	E	G	E	G	G	E	E	E	E
Terpinol	C	X	X	C	G	X	X	G	
Tertiary Butyl Amine			X	G					
Tertiary Butyl Mercaptan	X	X	X	X	X	X	X		
Test Entry	G	E					X		
Tetrachlorobenzene	X		X			X	X	G	G
Tetrachloroethane	X		X			X	X	E	G
Tetrachloroethylene	X	X	X	X	X	X	X	E	E
Tetrachloromethane	X		X			X	X	E	E
Tetrachloronaphthalene	X		X			X	X	G	G
Tetraethylene Glycol	E		E			E	E		E
Tetrahydrofuran	X	X	X	X	X	X	X	C	G
THF								C	I
Tin Chloride	E		E			E	E	E	E
Titanium Tetrachloride	X	X	X	X	G	X	X		G
Toluene	E	X	X	X	X	X	X	G	E
Toluidine									F
Toluol									E
Transformer Oil	X	G	C	X	E	X	X		F
Transmission 'A' Oil	X	G	X	X	E	X	X	F	G
Tri(2-Hydroxyethyl) Amine									E
Tributyl Phosphate	E	X	X	G	X	X	X	E	E
Tributylamine	E	G	F			G	G		E
Trichloroacetic Acid	G	X	X	G	G	C	G	E	
Trichlorobenzene	X		X			X	X	G	G
Trichloroethane	X	X	X	X	X	X	X	G	E
Trichloroethylene	X	X	X	X	X	X	X	G	F
Tricresyl Phosphate	E	X	X	X	X	X	X	E	E
Triethanolamine	E	G	G	G	C	E	X	E	E
Triethylamine	E		F			G	G		E

Chemical/Material Conveyed	Butyl	Neoprene	Hypalon	EPDM	Buna-N	Natural	SBR	XLPE	UHMWPE
Triethylene Glycol	E		E			E	E		E
Trimethylamine								E	
Trisodium Phosphate	E	E	E	E	E	E	E	E	E
Tung Oil		G							
Tungoil (China Oil)	C	G	C	X	E	X	X	E	
Turpentine	X	X	X	X	X	X	X	G	E
UDMH		G	E	E	G	E	E		
Urea	E	E						E	E
Urethane Formulations					E				
Varnish	X	X	X	X	G	X	X		
Vegetable Oils	E	C	X	C	E	X	X	E	
Versilube F44					E				
Versilube F55				X	E				
Vinegar	E	F	F	E	X	E	F	X	
Vinyl Acetate	G		X			X	X	E	E
Vinyl Benzene	X		X			X	X	G	E
Vinyl Chloride	X	X	X	X	X	X	X	E	E
Vinyl Ether	G		X			X	X	E	E
Vinyl Toluene	X		X			X	X	E	E
Vinyl Trichloride	X		X			X	X	E	E
Vital, 4300, 5310				X	X				
VM & Naphtha	X	F	X	X	E	X	X	X	E
Water	E	G	E	E	E	E	F	E	E
Water, Boiling		E		E					
Wemco C	X	G	X	X	E	X	X		
Whiskey	E	E	E	E	E	E	E	X	
White Oil	X	E	X	X	E	X	X	X	E
White Pine Oil	X	X	X	X	G	X	X		
Wines	E	E	E	E	E	E	E	X	
Wood Alcohol	E	E	E	E	E	E	E	E	E
Wood Oil	X	G	C	X	E	X	X	E	
Xenon	E	E	E	E	E	E	E		
Xylene, Xylon	X	X	X	X	X	X	X	G	G
Xylidine	X	C	X	G	C	C	C	G	G
Zeolites	E	E	E	E	E	E	E		
Zinc Acetate	E	E	E	E	E	E	X		
Zinc Carbonate	E		E			E	E	E	E
Zinc Chloride	E	E	E	E	E	E	E	E	E
Zinc Chromate	E		F					G	E
Zinc Sulfate	E	E	E	E	E	E	E	E	E
1 Undecanol	E		E			E	E	E	G
1-Decanol	E		E			E	E	E	E
1,4-Dioxane	G	X	X	E		X	X	E	
2-Aminoethanol	E		G			G	G		
2-Chlorophenol	X	X	X	X	X	X	X	G	E
2-Chloropropane		X	X	X		X	X	E	E
2-Ethyl (Butyraldehyde)	E		X			X	X	E	E
2-Ethyl-1-Hexanol	E	E	E	E	E	E	E	E	E
2-Ethylhexanoic Acid									E
2-Ethylhexyl Acetate									E
3-Coal Oil								E	