

CAT 1

24

PUSH ON  
GARDEN  
FERRULES  
CRIMPING TOOLS

# SEALFAST



**SEALFAST**  
THE SIMPLE SOLUTION



## INDEX

○ PUSH ON .....	2, 3
○ GARDEN .....	4, 5
○ FERRULES .....	6
○ CRIMP TOOLS .....	7
○ TECHNICAL DATA .....	8-11



TERMS OF SALE

DISCLAIMERS

TERMS:

1/2% 10 Days, net 30 Days

FREIGHT:

All shipments are made FOB Seal Fast Inc. or Point of Manufacturer. (Applies to shipments from Houston Warehouse Only) Freight prepaid on 1000 net couplings and accessories, \$1500 Net Couplings, PVC Tubing, Braided Tubing and Fire Hose. Freight prepaid on \$3000 Net Couplings, Rubber Hose, PVC Hose and Sheet Rubber with the exclusion of all PVC Suction including 6" and 8" PVC Suction ONLY orders. If combined with other items freight is prepaid at \$3000 Net, otherwise these items will Not be applied toward prepaid freight. **Effective immediately, regardless of invoice value, all uncoupled cut lengths of hoses are shipped FOB Seal Fast Inc.** Seal Fast Inc. reserves the right to determine the most Economical shipping method on all prepaid shipments. **In addition, Seal Fast Inc. reserves the right to refuse any prepaid shipments exceeding 6% freight cost of the order unless items are added or subtracted to keep said freight cost at or below 6%.** Applies to Continental United States, excluding Alaska and Hawaii. **Any evidence of shortage must be reported to Seal Fast Inc. within 10 days. Any Damage to hose/hoses, etc. customer is responsible for filing a claim with the delivery carrier within 10 days. Seal Fast Inc. will not issue credit.**

ALL UPS prepay and add or collect shipments will endure a **\$7.50** shipping and handling fee including All backorders. All drop shipments will endure a \$5.00 fee.

WARRANTY:

Products are warranted against defects in workmanship and defects in material. Products having such defects will be replaced or credited as Seal Fast elects. Liability is limited to the invoice value of the defective item. Our responsibility shall not exceed the original purchase price of the defective product. In any event, Seal Fast, Inc. shall not be held responsible for any special or consequential damages.

RETURNED GOODS:

If for any reason you wish to return goods, please contact Seal Fast Inc. for prior authorization number. Goods must be returned within 30 days and must be in new and resaleable condition. Minimum handling charge is 15%.

**All discrepancies in shipment / invoice must be reported within 10 days of receipt of goods.**

PROMPTPAYMENT:

Orders receive preferred treatment when the account is paid promptly. Orders may be held up if any unpaid invoice exceeds 30 days.

MINIMUM INVOICE:

All invoices are subject to a minimum billing charge of 50.00 net. Returned checks are subject to a \$25.00 service charge.

GENERAL:

Orders will be accepted subject to delays caused by accident, strike, fire or other causes beyond the control of the seller including failure of seller's suppliers to deliver. Prices, discounts and other specifications are subject to change without notice. All prices are subject to any applicable taxes imposed. The possessions of this price schedule is not to be construed as an offer to sell at the prices shown. Special price for volume quotes will be accepted in writing only.

PLEASE NOTE:

Extra care is taken in the preparation of this literature but Seal Fast, Inc. is not responsible for any inadvertent typographical errors or omissions.

STOCKING WAREHOUSES

SEAL FAST, INC.

5603 Harvey Wilson Dr.

Houston, TX 77020

(713) 675-6324 or 800-231-0734

| FAX (713) 675-0146 or 800-681-1515

| E-mail sales@sealfast.com

PORTER ASSOCIATES

1150 Boot Road

Unit 1

Downingtown, PA 19335

(610) 518-2301

ASPEN MARKETING, INC

5160 Fox Street

Denver, CO 80216

(303) 455-8175

(303) 477-6504 Fax

THE WAGNER GROUP

125 State St.

P O Box 1683

Elkhart, IN 46516

(574) 294-2769

(574) 522-2083 Fax

DISCLAIMERS

Product Images

- Seal Fast makes every reasonable effort to show accurate product representation, however pictures are for reference only, and do not necessarily reflect the exact product you will receive.
- Seal Fast reserves the right to alter product appearance without notice. Some product features shown in pictures may no longer be available.

Product Specifications

- Seal Fast is continuously working to provide the best quality for the best price.
- We reserve the right to alter product specifications without notice.

Product Usage

- Our Sales Team will do their best to assist in choosing the best product for a particular application. However, it is ultimately the customer's responsibility to determine the correct product for the correct application.
- Seal Fast will not be held liable for the abuse or misuse of our products in a manner in which they are not designed.
- Seal Fast cannot guarantee the integrity of an assembly if other manufacturers parts are used.

Product Availability

- Seal Fast reserves the right to discontinue products at any time without prior notice.

Product Pricing

- Seal Fast is constantly doing our best to maintain pricing levels. However, circumstances change and while many prices go down, others will increase.
- Please contact your sales associate for current pricing.

BRASS FITTINGS

PUSH ON

PUSH ON

BRASS FITTINGS

GRIP-ON

► Used With Thermoplastic Or Rubber Push-on Style Hose Ease of assembly - push on design - Excellent vibration characteristics Plastic Protection Cap Included

Hose x Male NPT



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	1/8"	301-42	
1/4"	1/4"	301-44	
1/4"	3/8"	301-46	
5/16"	1/8"	301-52	
3/8"	1/8"	301-62	
3/8"	1/4"	301-64	
3/8"	3/8"	301-66	
1/2"	3/8"	301-86	
1/2"	1/2"	301-88	
1/2"	3/4"	301-812	
5/8"	1/2"	301-108	
3/4"	3/4"	301-1212	
1"	1"	301-1616	

Hose x FPT



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	1/8"	3099-42	
1/4"	1/4"	3099-44	
1/4"	3/8"	---	
5/16"	1/8"	3099-52	
3/8"	1/8"	3099-62	
3/8"	1/4"	3099-64	
3/8"	3/8"	3099-66	
1/2"	3/8"	3099-86	
1/2"	1/2"	3099-88	
1/2"	3/4"	3099-812	
5/8"	1/2"	3099-108	
3/4"	3/4"	3099-1212	
1"	1"	3099-1616	

Hose x 45° SAE Male



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	1/4"	302-44	
1/4"	5/16"	302-45	
1/4"	3/8"	302-46	
3/8"	3/8"	302-66	
1/2"	1/2"	302-88	
3/4"	3/4"	302-1212	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	

Hose x Female 45° Flare



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	3/8"	307-46	
3/8"	3/8"	307-66	
3/4"	3/4"	307-1212	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	
---	---	---	

Hose x Inverted Flare

Male, Swivel



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	3/16"	305-43	
1/4"	1/4"	305-44	
1/4"	5/16"	305-45	
5/16"	5/16"	305-55	
3/8"	3/8"	305-66	
1/2"	1/2"	305-88	
5/8"	5/8"	305-1010	

Hose x Inverted Flare



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	3/16"	306-43	
1/4"	1/4"	306-44	
1/4"	5/16"	306-45	
5/16"	5/16"	306-55	
3/8"	3/8"	306-66	
1/2"	1/2"	306-88	
5/8"	5/8"	306-1010	

Hose x JIC Female

Swivel 37°



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	1/4"	308-44	
1/4"	3/8"	308-46	
3/8"	3/8"	308-66	
1/2"	1/2"	308-88	
3/4"	3/4"	308-1212	
1"	1"	308-1616	
---	---	---	

Hose x JIC Male 37°



Hose ID	Pipe Thread	Brass	
		Part #	List
1/4"	1/4"	310-44	
1/4"	5/16"	310-45	
3/8"	3/8"	310-66	
1/2"	1/2"	310-88	
3/4"	3/4"	310-1212	
1"	1"	310-1616	
---	---	---	

Hose x Hose Splicer



Hose ID	Brass	
	Part #	List
1/4"	304-44	
5/16"	304-55	
3/8"	304-66	
1/2"	304-88	
5/8"	304-1010	
3/4"	304-1212	
1"	304-1616	

Push-On Air Hose



Hose ID	Working Pressure psi	Bend Radius	Weight Per Ft	Standard Length Ft	Black Nitrile	
					Part #	List/Ft
1/4"	300max	3.0	9	100'/300'	PH025	
3/8"	300max	3.0	12	100'/300'	PH038	
1/2"	300max	5.0	15	100'/300'	PH050	

This oil resistant hose is excellent for use with air tools, mild chemicals and various petroleum products. Special braid angle for quick secure push-on coupling retention.

Temperature range: -40° F to 212° F

Tube: Black Nitrile

Reinforcement: Black Neoprene

Cover: One Textile Braid

Safety Factor: 3:1

HOSE SHANKS

► NPT Threads



Hose ID	Thread Size	BRASS					
		Hose End End X Male NPT		Hose End X Female NPT		Female NPT Swivel End X Hose End	
		Part #	List	Part #	List	Part #	List
1/8"	1/8"	201A-2A		209A-2A		209AS-2A	
3/16"	1/8"	201A-3A		209A-3A		209AS-3A	
3/16"	1/4"	201A-3B		209A-3B		209AS-3B	
1/4"	1/8"	201A-4A		209A-4A		---	
1/4"	1/4"	201A-4B		209A-4B		209AS-4B	
1/4"	3/8"	201A-4C		209A-4C		---	
5/16"	1/8"	201A-5A		209A-5A		---	
5/16"	1/4"	201A-5B		209A-5B		209AS-5B	
5/16"	3/8"	201A-5C		209A-5C		---	
3/8"	1/8"	201A-6A		209A-6A		---	
3/8"	1/4"	201A-6B		209A-6B		209AS-6B	
3/8"	3/8"	201A-6C		209A-6C		209AS-6C	
3/8"	1/2"	201A-6D				---	
3/8"	3/4"	201A-6E		209A-6E		---	
1/2"	1/4"	201A-8B		209A-8B		---	
1/2"	3/8"	201A-8C		209A-8C		209AS-8C	
1/2"	1/2"	201A-8D		209A-8D		209AS-8D	
1/2"	3/4"	201A-8E		209A-8E		---	
5/8"	3/8"	201A-10C		---		---	
5/8"	1/2"	201A-10D		---		---	
5/8"	3/4"	201A-10E		---		---	
3/4"	1/2"	201A-12D		---		---	
3/4"	3/4"	201A-12E		209A-12E		209AS-12E	
1"	3/4"	201A-16E		---		---	



Hole ID	BRASS						
	Hose Barb Mender		Hose Barb Tees			Male NPT X Hose Barb 90	
	Part #	List	Part #	List		Part #	List
1/8"	HM-2		---			---	
3/16"	HM-3		---			HBT1-03	
1/4"	HM-4		HBT2-04			HBT1-04	
5/16"	HM-5		---			---	
3/8"	HM-6		HBT2-06			HBT1-06	
1/2"	HM-8		HBT2-08			HBT1-08	
5/8"	HM-10		---			HBT1-10	
3/4"	HM-12		HBT2-12			HBT1-12	



BRASS FITTINGS

GARDEN

GARDEN

BRASS FITTINGS

SHANK COUPLINGS - LONG SHANK



Size Hose x Thread	BRASS					
	Complete Set		Female		Male	
	Part #	List	Part #	List	Part #	List
1/2" x 3/4" NPSH	BLS050075		BLS050075F		BLS050075M	
1/2" x 3/4" GHT	BLS050075GHT		BLS050075GHTF		BLS050075GHTM	
5/8" x 3/4" NPSH	BLS058075		BLS058075F		BLS058075M	
5/8" x 3/4" GHT	BLS058075GHT		BLS058075GHTF		BLS058075GHTM	
3/4" x 3/4" NPSH	BLS075		BLS075F		BLS075M	
3/4" x 3/4" GHT	BLS075GHT		BLS075GHTF		BLS075GHTM	
1" x 1" NPSH	BLS100		BLS100F		BLS100M	

SHANK COUPLINGS - SHORT SHANK



Size Hose x Thread	BRASS					
	Complete Set		Female		Male	
	Part #	List	Part #	List	Part #	List
1/2" x 3/4" NPSH	BSS050075		BSS050075F		BSS050075M	
1/2" x 3/4" GHT	BSS050075GHT		BSS050075GHTF		BSS050075GHTM	
5/8" x 3/4" NPSH	BSS058075		BSS058075F		BSS058075M	
5/8" x 3/4" GHT	BSS058075GHT		BSS058075GHTF		BSS058075GHTM	
3/4" x 3/4" NPSH	BSS075		BSS075F		BSS075M	
3/4" x 3/4" GHT	BSS075GHT		BSS075GHTF		BSS075GHTM	

GARDEN HOSE



Size	HYBRID POLYMER		RUBBER			
	Premium GardenFlex		Round Rubber		Octagon Rubber	
	Part #	List	Part #	List	Part #	List
5/8" x 50'	GFH058050		RGH058050		ORGH058050	
5/8" x 100'	GFH058100		RGH058100		---	
3/4" x 50'	---		RGH075050		---	
3/4" x 100'	---		RGH075100		---	
1" x 50'	---		RGH100050		---	

GARDEN HOSE NOZZLES

Size	ULC Approved Shut-Off-Plastic	
	Part #	List
3/4" GHT GREEN	1040310	



GARDEN HOSE FITTINGS

Garden Threads



Garden Thread	Pipe Thread	BRASS					
		Female GHT x Female Pipe		Female GHT x Female Pipe Swivel		Male GHT X Female Pipe	
		Part #	List	Part #	List	Part #	List
3/4"	1/2"	5A-12D		5AS-12D		18A-12D	
3/4"	3/4"	5A-12E		5AS-12E		18A-12E	



Garden Thread	Pipe Thread	BRASS					
		Male Pipe x Male GHT		Male GHT x Male GHT		Female Hose Cap GHT	
		Part #	List	Part #	List	Part #	List
3/4"	3/8"	19A-12C		---		---	
3/4"	1/2"	19A-12D		---		---	
3/4"	3/4"	19AF-12DE		23A-12		GHN5H	



24155

19130

Garden Thread	Hose Shank	BRASS		Details	BRASS		
		Hose Barb x Hose Barb GHT					
		Part #	List		STYLE	Part #	List
3/4"	1/2"	202GHSH-88		1-1/2" FNST x 3/4" MGHT	Pin Lug	1913009	
3/4"	5/8"	202GHSH-1010		2-1/2" FNST x 3/4" MGHT	Pin Lug	1913037	
3/4"	3/4"	202GHSH-1212		3/4" FGHT x 3/4" MNPT	Hex	2415517	
				3/4" FGHT x 1" MNPT	Hex	2415518	
				1" FNPT x 3/4" MGHT	Hex	2415520	

BRASS FITTINGS

FERRULES

► Sold in pkg. quantity only

MEDIUM WEIGHT - FOR AIR & FLUID HOSE							
ID	Length	Hole	Metal Thickness	Cross Reference	Qty Per Pkg	BRASS	
						Part #	List ea
.478"	.687"	.328"	.025"	4750	50	B-478-L	
.525"	.500"	.406"	.020"	---	50	B-525- SP10	
.560"	1.00"	.437"	.025"	7325	50	B-560-SP1	
.593"	1.00"	.437"	.025"	7326	50	B-593-L	
.625"	1.00"	.437"	.025"	7327	50	B-625-SP4	
.656"	1.00"	.437"	.025"	7328	50	B-656-L	
.690"	1.00"	.500"	.025"	7329	50	B-690-L	
.718"	1.00"	.500"	.025"	7330	50	B-718-SP1	
.750"	1.00"	.625"	.025"	7331	50	B-750-SP3	
.781"	1.00"	.625"	.025"	7332	50	B-781-SP2	
.812"	1.00"	.625"	.025"	7333	50	B-812-L	
.825"	.546"	.562"	.020"	AA	50	B-825-SP2	
.850"	.968"	.687"	.025"	---	50	B-850-L	
.937"	.875"	.750"	.025"	7242	25	B-937-L	

LIGHT WEIGHT - FOR AIR & FLUID HOSE							
ID	Length	Hole	Metal Thickness	Cross Reference	Qty Per Pkg	BRASS	
						Part #	List ea
.380"	.500"	.265"	.020"	622	50	B-380-S	
.410"	.500"	.265"	.020"	620	50	B-410-S	
.450"	.562"	.343"	.020"	769	50	B-450-SP1-S	
.500"	.500"	.343"	.020"	624	50	B-500-SP2	
.525"	.470"	.360"	.020"	625	50	B-525-SP6	
.560"	.750"	.375"	.020"	3588	50	B-560-SP2	
.575"	.484"	.468"	.020"	KK	50	B-575-SP1	
.600"	.500"	.500"	.020"	JJ	50	B-600-SP2	
.625"	.500"	.500"	.020"	II	50	B-625-SP3	
.650"	.500"	.500"	.020"	HH	50	B-650-SP3	
.725"	.530"	.500"	.020"	EE	50	B-725-SP3	
.750"	.531"	.500"	.020"	DD	50	B-750-SP5	

LIGHT WEIGHT - FLUID HOSE							
ID	Length	Hole	Metal Thickness	Cross Reference	Qty Per Pkg	BRASS	
						Part #	List ea
.875"	.843"	.687"	.025"	7244A	50	B-875-SP1	
.900"	.875"	.687"	.025"	5029A	50	B-900-SP2	
.975"	.843"	.687"	.025"	5028A	50	B-975-SP2	
1.025"	.843"	.687"	.025"	7114A	50	B-1025-SP1	
1.050"	.843"	.687"	.025"	7145A	50	B-1050-SP1	
1.100"	.843"	.812"	.025"	5027A	50	B-1100-SP2	
1.175"	.875"	.875"	.025"	7088A	25	B-1175-SP1	
1.225"	.968"	.875"	.025"	---	25	B-1225-SP1	
1.275"	.968"	.875"	.025"	---	25	B-1275-SP1	
1.425"	.875"	1.062"	.025"	---	25	B-1425-SP1	
1.500"	.875"	1.125"	.025"	---	25	B-1500-S	
1.550"	.812"	1.125"	.025"	---	25	B-1550-S	

BRASS FITTINGS

CRIMPING TOOLS

► Our hose crimpers provide production capability & a big tool crimping advantages at just a fraction of the cost of other tools offering comparable results.

3041 & 3043 (Die Sizes - 3041-1 thru 3041-5 & 3048-5)		
Tool Included Dies		
	Part #	List
3041-1 thru 3041-5	3041	
3041-1 thru 3041-4 and 3048A	3043	

3042 (Capable of Die Sizes - 1/2" to 1" ID 7/8" to 1-1/2 OD)		
Tool Only - Dies Not Included		
	Part #	List
capable of 1/2" to 1" ID 7/8" to 1-1/2 OD	3042	

3041 & 3043 Dies			
Size	Mark		
		Part #	List
5/8"	no mark, 2	3041-1	
37/64"	2, 3	3041-2	
17/32"	3, 4	3041-3	
31/64"	4, 5	3041-4	
11/16"	5, no mark	3041-5	
7/16"	7W, 7W	3048A	
3/4"	8W, 8W	3049A	
13/16"	9W, 9W	3050A	
3/8"	10W, 10W	3051A	

3042 Dies			
Size	Mark		
		Part #	List
11/16"	1	3042-1	
23/32"	2	3042-2	
3/4"	3	3042-3	
25/32"	4	3042-4	
13/16"	5	3042-5	
27/32"	6	3042-6	
7/8"	7	3042-7	
29/32"	8	3042-8	
15/16"	9	3042-9	
31/32"	10	3042-10	
1"	11	3042-11	
1-1/32"	12	3042-12	
1-1/16"	13	3042-13	
1-1/8"	14	3042-14	
1-3/16"	15	3042-15	
1-1/4"	16	3042-16	
1-5/16"	17	3042-17	
1-3/8"	18	3042-18	
1-7/16"	19	3042-19	
1-1/2"	20	3042-20	



3041 - Arrangement follows: No mark w/Hole, 2, 3, 4, 5, no mark no hole.



3043 - Arrangement follows: No mark w/Hole, 2, 3, 4, 7W, 7W-w/One flat side.





TECHNICAL DATA

CORROSION RESISTANCE OF COUPLING MATERIALS

**CAUTION:** The following data has been compiled from generally available sources end should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

<b>RATINGS:</b> 1. Excellent 2. Good	3. Fair Conditional x. Not Satisfactory	<b>NOTES:</b> No rationg indicates no data available
---	--	--

AGENT	Mall. From Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202, 304, 308	Stainless 316	Monel
Acetate, Solvents, Crude		3				2	1	1	2
Acetate, Solvents, Pure		1	1	1		1	1	1	1
Acetic Acid	X	X	X	2	1	X	2	2	2
Acetic Acid Vapor	X	X		3		X	2	2	3
Acetic Anhydride	X	X		2		X	2	2	2
Acetone	1	1	1	1	1	1	1	1	1
Acetylene	1	2		1		1	1	1	2
Alcohols	1	2		1		1	1	1	1
Aluminum Sulfate	X	3	3	3	1	X	3	2	2
Alums	X	3	2	3	1	X	3	2	2
Ammonia Gas	1	X	3	1	3	1	1	1	X
Ammonium Chloride	1	3		1*		3	3	1	1
Ammonium Hydroxide	2	X		2		1	1	1	3
Ammonium Nitrate	1	X		2		1	1	1	3
Ammonium Phosphate (Ammoniacal)		X				1	1	1	2
Ammonium Phosphate (Neutral)		3				1	1	1	2
Ammonium Phosphate (Acid)		3				3	2	1	2
Ammonium Sulfate	1	3				2	1	1	2
Asphalt	1	2				2	1	1	1
Beer	2	2	1	1		X	1	1	1
Beet SugarLiquors	1	2		1		2	1	1	1
Benzene, Benzol	1	1	1	1	1	1	1	1	1
Benzine (petroleum-naphtha)	1	1		1		1	1	1	1
Borax	2	2				1	1	1	1
Boric Acid	X	3		1		3	2	1	1
Butane, Butylene	1	1	1	1		1	1	1	1
Butadiene		1				1	1	1	1
Calcium Bisulfate		X				X	2	1	X
Calcium Hypochlorite	3	3	3	X	3	X	3	2	3
Cane Sugar Liquors	1	2		1		2	1	1	1
Carbon Dioxide (Dry)	1	1		1		1	1	1	1
Carbon Dioxide (Wet & Aqueous Sol)	2	3		2		2	1	1	2
Carbon Disulfide	2	3		2		2	1	1	3
Carbon Tetrachloride	3	1	2	3	1	1	1	1	1
Chlorine (Dry)	2	2	2	1	2	2	2	2	1
Chlorine (Wet)	X	X	3	X	2	X	X	3	3
Chromic Acid		X	X	X	1	3	2	2	3
Citric Acid	X	3		1		3	X	1	2
Coke Oven Gas	1	3		2		1	1	1	2
Copper Sulfate	X	X		X		1	1	1	3
Core Oils		1	1			1	1	1	1
Cottonseed Oil	1	1	1	1		1	1	1	1
Creosote	2	3		1		1	1	1	1
Ethers	2	1		1		1	1	1	1
Ethylene Glycol	2	2				1	1	1	1
Ferric Chloride	X	X	X	X	1	X	X	X	X
Ferric Sulfate	X	X		X		1	1	1	3
Formaldehyde	2	2		2		1	1	1	1

TECHNICAL DATA

CORROSION RESISTANCE OF COUPLING MATERIALS

**CAUTION:** The following data has been compiled from generally available sources end should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

<b>RATINGS:</b> 1. Excellent 2. Good	3. Fair Conditional x. Not Satisfactory	<b>NOTES:</b> No rationg indicates no data available
---	--	--

AGENT	Mall. From Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202, 304, 308	Stainless 316	Monel
Formic Acid	X	2		X		X	2	1	2
Freon	3	1	1	1		1	1	1	1
Furfural	1	2		1		1	1	1	1
Gasoline (Sour)	3	3		3		3	1	1	X
Gasoline (Refined)	1	1	1	1		1	1	1	1
Gelatin	1	3		1		1	1	1	1
Glucose	1	1		1		1	1	1	1
Glue	1	3		1		1	1	1	1
Glycerine or Glycerol	1	2		1		1	1	1	1
Hydrochloric Acid	X	X	X	X	1	X	X	X	X
Hydrocyanic Acid	3	X		1		3	1	1	2
Hydrofluoric Acid	X	3	3	X	X	X	X	X	X
Hydrogen Fluoride		3				X	X	3	1
Hydrogen	1	1		1		1	1	1	1
Hyrogen Peroxide	X	X		1		1	2	1	2
Hydrogen Sulfide (Dry)	3	3		2		3	2	1	3
Hydrogen Sulfide (Wet)	3	3		2		3	2	1	3
Lacquers and Lacquer Solvents	3	2		1		1	1	1	1
Lactic Acid	X			3			3	2	1
Lime-Sulfur	2	X		2		1	1	2	
Linseed Oil	1	1		1			1	1	1
Magnesium Chloride	3	3		X		3	2	1	1
Magnesium Hydroxide	1	2		X		1	1	1	1
Magnesium Sulfate	2	2		3		1	1	1	1
Mercuric Chloride	3	X		X		X	X	3	X
Mercury	1	X		X		1	1	1	2
Milk	3	3		1		2	1	1	3
Molasses	2	X		2		2	1	1	1
Natural Gas	1	2		1		1	1	1	1
Nickel Chloride		X		X		X	3	2	2
Nickel Sulfate		3		X		3	2	1	1
Nitric Acid	X	X	X	3	1	2	2	2	X
Oleic Acid	2	3		1		2	2	1	1
Oxalic Acid	3	3		2		3	2	1	1
Oxygen	1	1	1	1		1	1	1	1
Palmitic Acid	1	3		1		2	2	1	1
Petroleum Oils (Sour)		3				3	1	1	X
Petroleum Oils (Refined)	1	1	1	1		1	1	1	1
Phosphoric Acid 25%	3	X		3	3	X	3	1	2
Phosphoric Acid 25-50%	X	X		X	3	X	X	2	2
Phosphoric Acid 50-85%	X	X		X	X	X	X	2	2
Picric Acid	3	X		3		2	1	1	X
Potassium Chloride	2	3		3		3	2	1	1
Potassium Hydroxide	3	X		X		1	1	1	1
Potassium Sulfate	2	2		1		1	1	1	1
Propane	1	1				1	1	1	1
Rosin (Dark)	1	2			1	1	1	1	1
Rosin (Light)		X		1		1	1	1	2

TECHNICAL DATA

CORROSION RESISTANCE OF COUPLING MATERIALS

**CAUTION:** The following data has been compiled from generally available sources end should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

**RATINGS:** 1. Excellent 3. Fair Conditional  
2. Good x. Not Satisfactory **NOTES:** No rationg indicates no data available

AGENT	Mall. From Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202, 304, 308	Stainless 316	Monel
Shellac		2		2		1	1	1	1
Sludge Acid		X				X	X	3	2
Soda Ash (Sodium Carbonate)	1	2		X		1	1	1	1
Sodium Bicarbonate	3	1		X		1	1	1	1
Sodium Bisulfate	X	3		3		X	1	1	1
Sodium Chloride	2	3	2	X	1	3	2	1	1
Sodium Cyanide	2	X		X		1	1	1	2
Sodium Hydroxide	3	X	3	X	X	2	2	2	1
Sodium Hypochlorite	X	X		X		X	3	2	3
Sodium Metaphosphate	X	3		1		2	1	1	1
Sodium Nitrate	1	3		1		1	1	1	1
Sodium Perborate	3	3		1		1	1	1	1
Sodium Peroxide	3	3		1		1	1	1	1
Sodium Phosphate (Alkaline)		3				1	1	1	1
Sodium Phosphate (Neutral)		2				1	1	1	1
Sodium Phosphate (Acid)		2				X	2	1	1
Sodium Silicate	1	3		X		1	1	1	1
Sodium Sulfate	1	2		3		1	1	1	1
Sodium Sulfide	1	X				1	1	1	2
Sodium Thiosulfate (Hypo)	3	X		X		1	1	1	2
Stearic Acid	3	3		3		2	2	1	1
Sulfate Liquors		X				1	1	1	2
Sulfur	2	X		2		2	2	1	3
Sulfur Chloride	X	X				X	3	2	2
Sulfur Dioxide (Dry)	2	1		1		1	1	1	1
Sulfur Dioxide (Wet)		X				X	2	1	X
Sulfuric Acid 10%	X	X	3	3		X	X	2	2
Sulfuric Acid 10-75%	X	X	X	X		X	X	X	2
Sulfuric Acid 75-95%	3	X	X	X		3	3	2	3
Sulfuric Acid 95%	2	X	X			2	2	2	X
Surlfurous Acid	X	X		X		X	3	2	X
Tannic Acid	3	3	1	X			1	1	1
Tar	1	2		1		2	1	1	1
Toluene, Toluol	1	1		1		1	1	1	1
Trichlorethylene	3	1		3		1	1	1	1
Turpentine		3		1		3	1	1	1
Varnish	2	2				1	1	1	1
Vegetable Oils	1	2		1		1	1	1	1
Vinegar	3	3		3		3	2	1	2
Water (Acid Mine Water)	3	X		3		2	1	1	3
Water (Fresh)	3	1		1		1	1	1	1
Water (Salt)	3	3	2	X		3	2	2	1
Whiskey	X	2				3	1	1	2
Wines	X	2				3	1	1	2
Xylene, Xylol	2	1		1		1	1	1	1
Zinc Chloride	X	X		X		3	2	1	1
Zinc Sulfate	3	3		3		3	2	1	1

TECHNICAL DATA

OIL & GASOLINE RESISTANCE

Rubber hose is used to convey petroleum products both in the crude and refined stages. The aromatic content of re-fined gasoline is often adjusted to control the octane rating. The presence of aromatic hydrocarbons in this fuel generally has a greater effect on rubber components than do aliphatic hydrocarbons. Aromatic materials in contact with rubber tend to soften it and reduce its physical properties. For long lasting service, the buyer of gasoline hose should inform the hose manufacturer of the aromatic content of the fuel to be handled so that the proper tube compound can be recommended for the specific application.

The effects of oil on rubber depend on a number of factors that include the type of rubber compound, the composition of the oil, the temperature and time of exposure. Rubber compounds can be classified as to their degree of oil resistance based on their physical properties after exposure to a standard test fluid. In this RMA classification, the rubber samples are immersed in IRM 903 oil at 100°C for 70 hours. (See ASTM Method D-471 for a detailed description of the oil and the testing procedure.) As a guide to the user of hose in contact with oil, the oil resistance classes and a corresponding description are listed.

PHYSICAL PROPERTIES AFTER EXPOSURE TO OIL:

		VOLUME CHANGE MAXIMUM	TENSILE STRENGTH RETAINED
CLASS A	(HIGH OIL RESISTANCE).....	+25%	80%
CLASS B	(MEDIUM/HIGH OIL RESISTANCE).....	+65%	50%
CLASS C	(MEDIUM OIL RESISTANCE).....	+100%	40%

CHEMICAL RECOMMENDATIONS

The materials being handled by flexible rubber hose are constantly increasing in number and diversity. T o assist in the selection of the proper elastomer for the service conditions encountered, the following table has been prepared. The reader is cautioned that it is only a guide and should be used as such, as the degree of resistance of an elastomer with a particular fluid depends upon such variables as temperature, concentration, pressure, velocity of flow, duration of exposure, aeration, stability of the fluid, etc. Also variations in elastomer types and special compounding of stocks to meet specific service conditions have considerable influence on the results obtained. When in doubt, it is always advisable to test the tube compound under actual service conditions. If this is not practical, tests should be devised that simulate service condtions or the hose manufacturer contacted for Recommendations.

The following table lists the more commonly used materials, chemicals, solvents, oils, etc. The recommendation are based on room temperature and pressure conditions normally recommended for the particular type of hose being used. Where conditions beyond this can be met readily, they have been so indicated; where conditions are not normal and cannot be readily met, the hose manufacturer should always be consulted. The table does not imply conformance to the Food & Drug Administration requirements of Federal or State Laws when handling food products.

**TABLE OF CHEMICAL, OIL & SOLVENT RESISTANCE OF HOSE:**  
**WARNING:** The following data has been compiled from generally available sources and should not be relied upon without consulting and following the hose manufacturer's specific chemical recommendations. Neglecting to do so might result in failure of the hose to fulfill its intended purpose, and may result in possible damage to property and serious bodily injury.

RESISTANCE RATING	RELASTOMERS/PLASTICS	
<b>A</b> - Good Resistance, usually suitable for service.	<b>NR</b> - Natural Rubber	<b>EPDM</b> - Ethylene-propylene-diene-terpolymer
<b>F</b> - Fair Resistance, the chemical has some deteriorative effects, but the elastomer is still adequate for moderate service.	<b>IR</b> - Isoprene, synthetic	<b>MQ</b> - Dimethyl-polysiloxane
	<b>SBR</b> - Styrene-butadiene	<b>FKM</b> - Fluoracarbon rubber
<b>C</b> - Depends on Condition, moderate service may be possible if chemical exposure is limited or infrequent.	<b>CR</b> -Chloroprene	<b>CM</b> - Chloro-polyethylene
	<b>NBR</b> - Nitrile-butadiene	<b>ECO/CO</b> - Ephichlorohydrin
<b>X</b> -Not recommended, unsuitable for service.	<b>IIR</b> -Isobutene-isoprene	<b>EXLPE</b> - Chloro-sulfonyl-polyethylene
<b>I</b> - Insufficient Information, not enough data available at the time of publication to determine rating.	<b>CSM</b> - Chloro-sulfonyl-polyethylene	



## NOTES

[illegible]