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INDUSTRIAL HOSE

PRODUCT CATALOGUE

OUR VISION

“CONTINUALLY PUSH THE BOUNDARIES OF MATERIALS SCIENCE TO ADVANCE THE WAY THE WORLD MOVES.”

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APPLICATION ICONS


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BLOWER HOSE


CEMENT POWDER, SAND


CHEMICALS


COLD WATER


FOOD


GRANULATES, POWDERS


MILK


NITROGEN


OIL


PLASTER, CONCRETE


PRESSURE WASH & WASH DOWN


RADIATOR


VAPOUR


WATER, SEA WATER, WASTE WATER, MUD, SLURRY

HOMOLOGATION ICONS

FDA (US Food and Drug Administration) is an agency within the Department of Health and Human Services and consists of centres and offices. The FDA is responsible for protecting the public health by assuring the safety, efficacy, and security of human and veterinary drugs, biological products, medical devices, our nation's food supply, cosmetics, and products that emit radiation.

The Federal Institute for Risk Assessment (BfR) is active in the field of consumer health protection. Its tasks include the assessment of existing and the identification of new health risks, the drawing up of recommendations on risk reduction, and the communication of this process.

The United States Pharmacopeia (USP) is a non–governmental, official public standards– setting authority for prescription and over–the–counter medicines and other healthcare products manufactured or sold in the United States. USP also sets widely recognised standards for food ingredients and dietary supplements. USP sets standards for the quality, purity, strength, and consistency of these products – critical to the public health.

A hose which is capable of discharge is a hose with a resistance of more than 103 Ω/m and less than 106 Ω/m and is indicated with an Ω icon. An object or device is capable of discharge if its surface resistance is between 104 Ω and 109 Ω measured at +23 °C and 50% relative humidity. The characteristic of being able to discharge is also referred to as being "anti-static".

Animal Derived Ingredients (ADI) can cause the disease BSE and should therefore be avoided in products that may come into contact with products that are intended for human consumption. Hose liner material ingredients and process aids can contain ADI. GATES has therefore checked the compound portfolio and can now offer a broad selection of ADI free food and beverage hoses.

SELECTION TABLE

	HOSE TYPE	APPLICATION								TUBE(1)	DISCHARGE (D) /SUCTION & DISCHARGE (SD)	TEMPERATURE RANGE MIN./MAX. °C	SIZE VS WP (MPa)						
		AIR	CLEANING	WATER	OIL	CHEMICAL	STEAM	FOOD	ABRASION				6 mm	8 mm	10 mm	13 mm	16 mm	19 mm	22 mm
CLEANING	CLEAN MASTER™ PLUS 6000 PRESSURE WASH		x							NBR	SD	-40/150	42.0	42.0	42.0	42.0			
	CLEAN MASTER PRESSURE WASH		x							NBR	SD	-40/150	28.0	28.0	28.0	21.0			
PETROLEUM TRANSFER	PREMIUM FUEL MASTER D			x	x					NBR	D	-30/90						2.0	
	PREMIUM FUEL MASTER SD			x	x					NBR	SD	-30/90						1.6	
	ESSENTIAL OIL MASTER SD			x	x					NBR	SD	-30/100						1.0	
	ESSENTIAL OIL MASTER LITE SD			x	x					NBR	SD	-30/100						1.0	
	ESSENTIAL REEL MASTER D			x	x					NBR	D	-30/70							
	ESSENTIAL BUNKER MASTER D			x	x					NBR	D	-30/90							
	PREMIUM TAR MASTER SD			x	x					NBR	SD	-30/160							
STEAM	PREMIUM STEAM MASTER			x			x			EPDM	D	-40/210				1.8	1.8	1.8	
	PREMIUM STEAM MASTER RED			x			x			EPDM	D	-40/210				1.8	1.8	1.8	
	PREMIUM HEATER MASTER			x			x			EPDM	D	-20/164				0.6	0.6	0.6	
ACID-CHEMICAL	PREMIUM CHEM MASTER XLPE SD			x		x				XLPE	SD	-20/65						1.6	
	PREMIUM CHEM MASTER EPDM D			x		x				EPDM	D	-40/95				1.6		1.6	1.6
	PREMIUM CHEM MASTER EPDM SD			x		x				EPDM	SD	-40/95						1.6	
	PREMIUM CHEM MASTER UHMWPE SD	x		x		x				UHMWPE	SD	-20/65				1.6		1.6	
FOOD & BEVERAGES	PREMIUM DAIRY MASTER SD			x				x		NBR	SD	-30/90							
	PREMIUM DAIRY MASTER LITE SD			x				x		NBR	SD	-30/90							
	PREMIUM WASHDOWN MASTER			x			x			EPDM	D	-30/164			0.6	0.6	0.6	0.6	
	PREMIUM MILK MASTER SD			x				x		NR	SD	-30/70							
	PREMIUM BEVERAGE MASTER D			x				x		CR/NR	D	-30/90				1.6		1.6	
WATER & AIR	ESSENTIAL WATER MASTER D	x		x					x	EPDM	D	-35/80							
	ESSENTIAL WATER MASTER SD	x		x					x	EPDM	SD	-35/80							
	GP80 PLUS			x	x	x				NBR		-40/100	3.7	3.7	3.7	3.7	3.0	3.0	
	LOCK-ON PLUS	x		x	x					NBR	D	-40/100	2.1		2.1	2.1	2.1	2.1	
	PREMIUM GP MASTER	x		x	x					NBR	D	-40/95	2.5	2.5	2.5	2.5	2.5	2.5	
	GP60			x	x	x				NBR		-40/100	2.0	2.0	2.0	2.0	2.0	2.0	
	PREMIUM MULTI MASTER	x		x						EPDM	D	-40/100	2.0	2.0	2.0	2.0	2.0	2.0	
	PLANT MASTER XTREME 250	x		x	x					NBR	D	-40/100	1.7		1.7	1.7	1.7	1.7	
	GP40	x		x					x	EPDM	D	-40/100	1.3	1.3	1.3	1.3	1.3	1.3	
MATERIAL HANDLING	ESSENTIAL SANDBLAST MASTER D			x					x	NR/BR	D	-40/75						1.2	
	ESSENTIAL CEMENT MASTER D			x					x	NR/BR	D	-20/80							
	ESSENTIAL CEMENT MASTER SD			x					x	NR/BR	SD	-20/80							
	ESSENTIAL SILO MASTER D - FOOD			x				x	x	NR/BR	D	-20/80							
	ESSENTIAL SILO MASTER SD - FOOD			x				x	x	NR/BR	SD	-20/80							
	ESSENTIAL CONCRETE MASTER D			x					x	NR/BR/SBR	D	-20/70						4.0	

The recommended applications have to be interpreted as guidelines only. In case of other specific applications. please contact your Gates industrial hose supplier.

EXPLANATION OF TABLE SYMBOLS

HOSE BORE	HOSE OUTSIDE DIAMETER	MAXIMUM WORKING PRESSURE	MINIMUM BURST PRESSURE
			

SELECTION TABLE

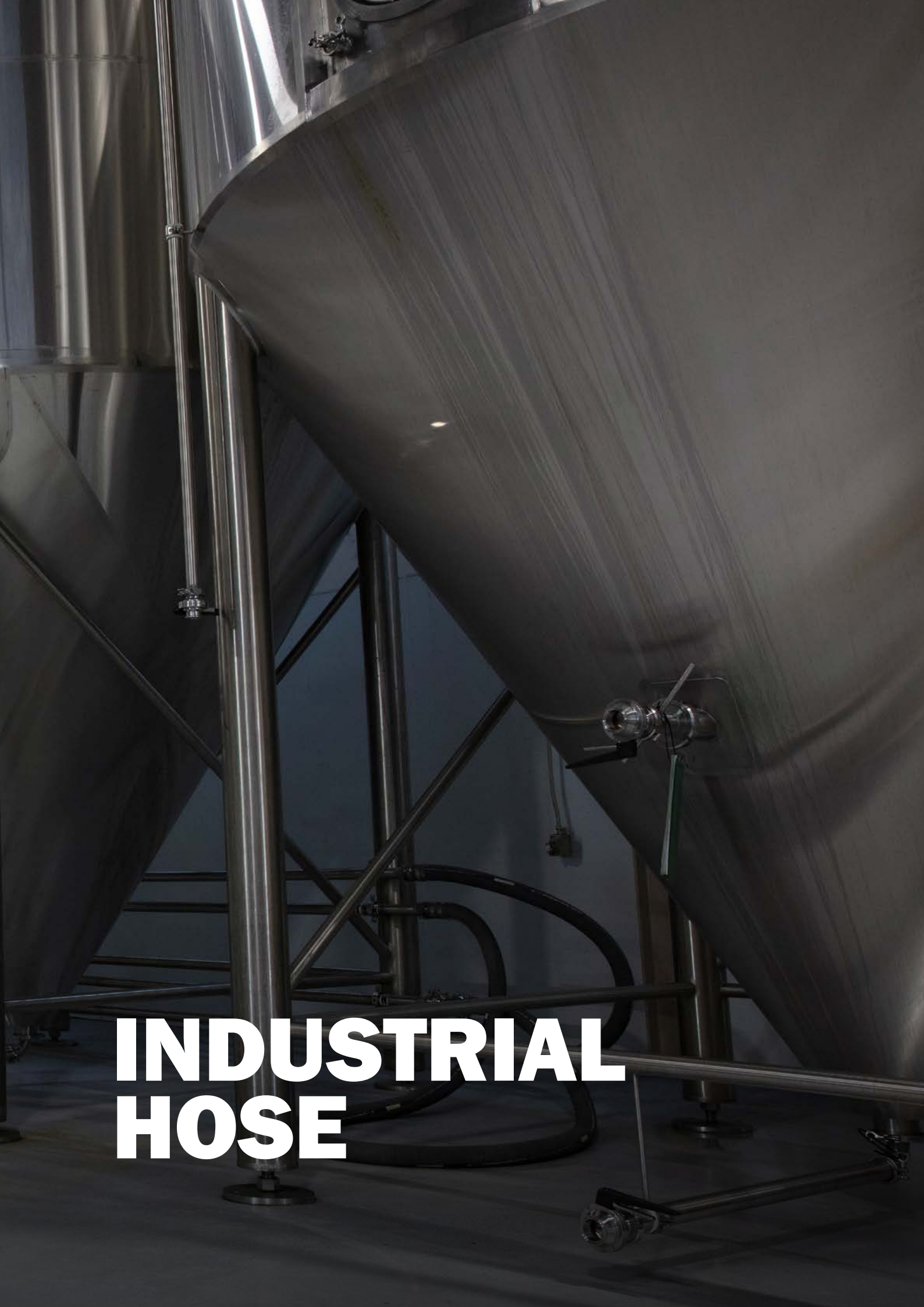
SIZE VS WP (MPa)																							STANDARDS & HOMOLOGATIONS	PAGE
25 mm	32 mm	35 mm	38 mm	40 mm	45 mm	50 mm	51 mm	57 mm	63 mm	65 mm	70 mm	75 mm	76 mm	80 mm	90 mm	100 mm	102 mm	110 mm	125 mm	127 mm	152 mm	203 mm	254 mm		
																									13
																									13
2.0	2.0		2.0			2.0	2.0		2.0			2.0	2.0			2.0	2.0				2.0			EN 12115 . EN 1761	14
1.6	1.6		1.6			1.6	1.6		1.6			1.6	1.6			1.6	1.6			1.6	1.6			EN 12115 . EN 1761	15
1.0	1.0		1.0			1.0				1.0		1.0				1.0			1.0		1.0				16
1.0	1.0		1.0				1.0			1.0			1.0		1.0	1.0				1.0	1.0				17
1.6	1.6	1.6	1.6	1.6			1.6																		18
													1.6				1.6			1.6	1.6	1.6	1.6		19
1.8	1.8		1.8				1.8		1.4				1.4				1.4								20
1.8	1.8		1.8				1.8																	EN ISO 6134:2005-2A	21
1.8	1.8		1.8				1.8																	EN ISO 6134:2005-2A	22
0.6	0.6		0.6				0.6																	BS 5122/A2	23
1.6	1.6		1.6			1.6	1.6			1.6		1.6	1.6			1.6									24
1.6	1.6		1.6			1.6	1.6		1.6			1.6	1.6			1.6	1.6							EN 12115	25
1.6	1.6		1.6			1.6	1.6		1.6			1.6	1.6			1.6	1.6				1.6			EN 12115	26
1.6	1.6		1.6			1.6	1.6		1.6			1.6				1.6	1.6							EN 12115	27
	1.0		1.0	1.0	1.0		1.0		1.0				1.0				1.0							FDA. BfR. ADI-free	30
	1.0		1.0	1.0	1.0		1.0		1.0				1.0				1.0							FDA. BfR. ADI-free	31
0.6	0.6		0.6				0.6																	FDA. ADI-free	32
			0.6	0.6	0.6		0.6		0.6		0.6		0.6				0.6							FDA. BfR. ADI-free	33
1.6	1.6		1.6	1.6			1.6		1.6				1.6	1.6			1.6							FDA. BfR. ADI-free	34
1.0	1.0		1.0				1.0		1.0				1.0				1.0			1.0	1.0	1.0			35
1.0	1.0		1.0				1.0		1.0				1.0				1.0			1.0	1.0	1.0			36
3.0	3.0		3.0				3.0																		37
																									38
2.5																									40
2.0																									41
2.0	2.0		2.0																						42
1.7	1.7		1.7																						43
1.3	1.3		1.3																						45
1.2	1.2		1.2																					DIN 53516	47
							0.8		0.8				0.8	0.8	0.8		0.8	0.8						DIN 53516	48
							0.8		0.8				0.8	0.8	0.8		0.8	0.8		0.8	0.8	0.8		DIN 53516	49
							0.8		0.8				0.8	0.8	0.8		0.8	0.8						FDA	50
							0.8		0.8				0.8	0.8	0.8		0.8	0.8		0.8	0.8	0.8		FDA	51
4.0	4.0	4.0	4.0			4.0			4.0															DIN 53516	52

(1) Indicates the main component of the compound

EXPLANATION OF TABLE SYMBOLS

MINIMUM BEND RADIUS	VACUUM	WEIGHT	PACKAGING	HOSE
				


FV55
FV54
FV53



INDUSTRIAL HOSE

CLEAN MASTER PLUS PRESSURE WASH 6000

-size	DN	"	"	mm	MPa	mm	kg/100m	Ref.
-4	6	1/4	0.52	13.1	42.0	50	25	4PWPLUS6000
-5	8	5/16	0.58	14.7	42.0	85	30	5PWPLUS6000
-6	10	3/8	0.68	17.3	42.0	110	39	6PWPLUS6000
-8	12	1/2	0.81	20.6	42.0	125	46	8PWPLUS6000
-4	6	1/4	0.52	13.1	42.0	50	25	4PWPLUS6000B
-5	8	5/16	0.58	14.7	42.0	85	30	5PWPLUS6000B
-6	10	3/8	0.68	17.3	42.0	110	39	6PWPLUS6000B
-8	12	1/2	0.81	20.6	42.0	125	46	8PWPLUS6000B
-4	6	1/4	0.52	13.1	42.0	50	25	4PWPLUS6000G
-5	8	5/16	0.58	14.7	42.0	85	30	5PWPLUS6000G
-6	10	3/8	0.68	17.3	42.0	110	39	6PWPLUS6000G
-8	12	1/2	0.81	20.6	42.0	125	46	8PWPLUS6000G

RECOMMENDED FOR	Use on pressure cleaning equipment for commercial and industrial purposes, in food processing, sanitation and car wash applications. All hot and cold water high-pressure cleaning services.
TUBE	NBR (Nitrile) based. Black.
REINFORCEMENT	Braided high-tensile steel wire.
COVER	NBR/PVC based. MSHA approved. Available in black, blue (B) and grey (G). Colour cover description is not included in the marking layline.
TEMPERATURE RANGE	-40°C to +150°C intermittent (to EN 1829-2) For water emulsions, etc. see Temperature Limits Table in catalogue E/50080
STANDARDS	Exceeds EN 1829-2.
COUPLINGS	MegaCrimp™.
CHARACTERISTICS / BENEFITS	Abrasion and ozone resistant cover. Light weight.
IMPORTANT	**Not for steam service.**

CLEAN MASTER PRESSURE WASH

-size	DN	"	"	mm	MPa	mm	m	kg/100m	Ref.
-4	6	1/4	0.52	13.2	28.0	50	91	24	4PW4000
-5	8	5/16	0.59	14.9	28.0	55	91	27	5PW4000
-6	10	3/8	0.66	16.8	28.0	65	91	34	6PW4000
-8	12	1/2	0.78	19.8	21.0	90	91	43	8PW3000
-5	8	5/16	0.59	14.9	28.0	55	91	27	5PW4000B
-6	10	3/8	0.66	16.8	28.0	65	91	34	6PW4000B
-8	12	1/2	0.78	19.8	21.0	90	91	43	8PW3000B
-6	10	3/8	0.66	16.8	28.0	65	91	34	6PW4000G
-8	12	1/2	0.78	19.8	21.0	90	91	43	8PW3000G

RECOMMENDED FOR	Use on pressure cleaning equipment for commercial and industrial purposes, in food processing, sanitation and car wash applications. All hot and cold water high-pressure cleaning services.
TUBE	NBR (Nitrile) based. Black.
REINFORCEMENT	One braid of high tensile steel wire.
COVER	Modified Nitrile. MSHA approved. Available in black, blue (B) and grey (G). Blue and grey covers are non-marking.
TEMPERATURE RANGE	-40°C to +150°C intermittent (to EN 1829-2). For water emulsions, etc. see Temperature Limits Table.
STANDARDS	Exceeds EN 1829-2.
COUPLINGS	MegaCrimp.
CHARACTERISTICS / BENEFITS	Abrasion and ozone resistant cover.
IMPORTANT	**Not for steam service.**

PREMIUM FUEL MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	31	6.0	2.0	8.0	133	60	40	FUEL MASTER D 19mm x CL40
19	31	6.0	2.0	8.0	133	60	61*	FUEL MASTER D 19mm x CL61
25	37	6.0	2.0	8.0	175	80	40	FUEL MASTER D 25mm x CL40
25	37	6.0	2.0	8.0	175	80	61*	FUEL MASTER D 25mm x CL61
32	44	6.0	2.0	8.0	224	90	40	FUEL MASTER D 32mm x CL40
32	44	6.0	2.0	8.0	224	90	61*	FUEL MASTER D 32mm x CL61
38	51	6.5	2.0	8.0	266	120	40	FUEL MASTER D 38mm x CL40
38	51	6.5	2.0	8.0	266	120	61*	FUEL MASTER D 38mm x CL61
50	66	8.0	2.0	8.0	350	160	40	FUEL MASTER D 50mm x CL40
51	67	8.0	2.0	8.0	357	160	40	FUEL MASTER D 51mm x CL40
51	67	8.0	2.0	8.0	357	160	61*	FUEL MASTER D 51mm x CL61
63	79	8.0	2.0	8.0	441	210	40	FUEL MASTER D 63mm x CL40
75	91	8.0	2.0	8.0	525	240	40	FUEL MASTER D 75mm x CL40
76	92	8.0	2.0	8.0	532	250	40	FUEL MASTER D 76mm x CL40
76	92	8.0	2.0	8.0	532	250	61*	FUEL MASTER D 76mm x CL61
100	116	8.0	2.0	8.0	700	340	40	FUEL MASTER D 100mm x CL40
102	118	8.0	2.0	8.0	714	350	40	FUEL MASTER D 102mm x CL40
102	118	8.0	2.0	8.0	714	350	61*	FUEL MASTER D 102mm x CL61
152	172	10.0	2.0	8.0	1050	680	40	FUEL MASTER D 152mm x CL40

* 61 m coils are made to order

RECOMMENDED FOR	Premium pressure hose (D) for mineral oil products and fuel mixtures with a maximum 50% aromatic content. Ideal for offshore/onshore transfer applications involving discharge service for diesel oils and other similar petroleum products where an extremely lightweight, flexible hose with a high rated working pressure and a small minimum bend radius is required.
TUBE	Black NBR1 rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +90°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN 12115, EN 1761.
BRANDING TRANSFER LABEL	PREMIUM FUEL MASTER D - EN 12115/ EN 1761 FUEL TRANSFER 20 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM FUEL MASTER D - EN 12115/ EN 1761 NBR1 - DIAM mm - 20 BAR - Ω - Q – year

PREMIUM FUEL MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	31	6.0	1.6	6.4	105	70	40	FUEL MASTER SD 19mm x CL40
19	31	6.0	1.6	6.4	105	70	61*	FUEL MASTER SD 19mm x CL61
25	37	6.0	1.6	6.4	138	80	40	FUEL MASTER SD 25mm x CL40
25	37	6.0	1.6	6.4	138	80	61*	FUEL MASTER SD 25mm x CL61
32	44	6.0	1.6	6.4	176	110	40	FUEL MASTER SD 32mm x CL40
32	44	6.0	1.6	6.4	176	110	61*	FUEL MASTER SD 32mm x CL61
38	51	6.5	1.6	6.4	209	130	40	FUEL MASTER SD 38mm x CL40
38	51	6.5	1.6	6.4	209	130	61*	FUEL MASTER SD 38mm x CL61
50	66	8.0	1.6	6.4	275	230	40	FUEL MASTER SD 50mm x CL40
51	67	8.0	1.6	6.4	281	230	40	FUEL MASTER SD 51mm x CL40
51	67	8.0	1.6	6.4	281	230	61*	FUEL MASTER SD 51mm x CL61
63	79	8.0	1.6	6.4	347	290	40	FUEL MASTER SD 63mm x CL40
75	91	8.0	1.6	6.4	413	330	40	FUEL MASTER SD 75mm x CL40
76	92	8.0	1.6	6.4	418	330	40	FUEL MASTER SD 76mm x CL40
76	92	8.0	1.6	6.4	418	330	61*	FUEL MASTER SD 76mm x CL61
100	116	8.0	1.6	6.4	550	440	40	FUEL MASTER SD 100mm x CL40
102	118	8.0	1.6	6.4	561	450	40	FUEL MASTER SD 102mm x CL40
102	118	8.0	1.6	6.4	561	450	61*	FUEL MASTER SD 102mm x CL61
127	147	10.0	1.6	6.4	688	690	40	FUEL MASTER SD 127mm x CL40
152	174	11.0	1.6	6.4	825	960	40	FUEL MASTER SD 152mm x CL40

* 61 m coils are made to order ** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium vacuum and pressure hose (SD) for mineral oil products and fuel mixtures with maximum 50% aromatic content. Ideal for offshore/onshore transfer applications involving suction and discharge service for diesel oils and other similar petroleum products where an extremely lightweight, hard wall, flexible hose with a high rated working pressure and a small minimum bend radius is required.
TUBE	Black NBR1 rubber, smooth and oil resistance.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +90°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN 12115, EN 1761.
BRANDING TRANSFER LABEL	PREMIUM FUEL MASTER SD - EN 12115/ EN 1761 – FUEL TRANSFER 16 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM FUEL MASTER SD - EN 12115/ EN 1761 – NBR 1 - DIAM mm - 16 BAR - Ω – Q - year

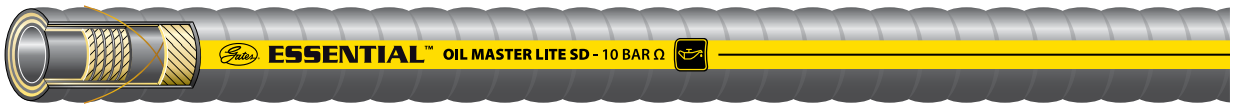
ESSENTIAL OIL MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	29	5.0	1.0	3.0	95	50	40	OIL MASTER SD 19mm x CL40
25	35	5.0	1.0	3.0	125	60	40	OIL MASTER SD 25mm x CL40
32	42	5.0	1.0	3.0	160	90	40	OIL MASTER SD 32mm x CL40
38	48	5.0	1.0	3.0	190	100	40	OIL MASTER SD 38mm x CL40
50	60	5.0	1.0	3.0	250	140	40	OIL MASTER SD 50mm x CL40
65	77	6.0	1.0	3.0	325	230	40	OIL MASTER SD 65mm x CL40
75	88	6.5	1.0	3.0	375	270	40	OIL MASTER SD 75mm x CL40
100	114	7.0	1.0	3.0	500	390	40	OIL MASTER SD 100mm x CL40
127	141	8.0	1.0	3.0	625	600	40	OIL MASTER SD 127mm x CL40
152	168	8.0	1.0	3.0	750	790	40	OIL MASTER SD 152mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Vacuum and pressure hose (SD) for transfer of fuel oil and other petroleum based products in home delivery, commercial and industrial service or in low pressure return lines. Transfer of refined fuels (commercial gasoline and diesel fuel), oils and other petroleum products. Ideal for oilfield service truck use. Service life of transfer hoses can be extended by draining hoses after use. Max 50% aromatic content.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix, two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +100°C.
BURST PRESSURE	> 30 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
BRANDING TRANSFER LABEL	ESSENTIAL OIL MASTER SD - 10 BAR Ω

ESSENTIAL OIL MASTER LITE SD



mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	29	5.0	1.0	3.0	95	50	40	OIL MASTER Lite SD 19mm x CL40
25	35	5.0	1.0	3.0	125	60	40	OIL MASTER Lite SD 25mm x CL40
32	42	5.0	1.0	3.0	160	90	40	OIL MASTER Lite SD 32mm x CL40
38	48	5.0	1.0	3.0	190	100	40	OIL MASTER Lite SD 38mm x CL40
50	61	5.0	1.0	3.0	255	140	40	OIL MASTER LITE SD 50mm x CL40
65	77	6.0	1.0	3.0	325	230	40	OIL MASTER Lite SD 65mm x CL40
76	88	6.0	1.0	3.0	380	270	40	OIL MASTER Lite SD 76mm x CL40
90	104	7.0	1.0	3.0	450	350	40	OIL MASTER Lite SD 90mm x CL40
100	114	7.0	1.0	3.0	500	390	40	OIL MASTER Lite SD 100mm x CL40
127	143	8.0	1.0	3.0	635	610	40	OIL MASTER Lite SD 127mm x CL40
152	168	8.0	1.0	3.0	760	790	40	OIL MASTER Lite SD 152mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Very flexible corrugated vacuum and pressure hose (SD) for transfer of fuel oil and other petroleum based products in home delivery, commercial and industrial service or in low pressure return lines. Transfer of refined fuels (commercial gasoline and diesel fuel), oils and other petroleum products. Ideal for oilfield service truck use. Service life of transfer hoses can be extended by draining hoses after use. Max 50% aromatic content.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and two crossing anti-static wires.
COVER	CR rubber, black, corrugated with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to 100°C.
BURST PRESSURE	> 30 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
COUPLINGS	-12 to -20: MegaCrimp; -24: GlobalSpiral Plus.
BRANDING TRANSFER LABEL	ESSENTIAL OIL MASTER LITE SD - 10 BAR Ω

ESSENTIAL REEL MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
25	35	5.0	1.6	4.8	175	70	61	REEL MASTER D 25mm x CL61
32	43	5.5	1.6	4.8	224	80	61	REEL MASTER D 32mm x CL61
35	46	5.5	1.6	4.8	245	90	61	REEL MASTER D 35mm x CL61
38	50	6.0	1.6	4.8	266	110	61	REEL MASTER D 38mm x CL61
40	52	6.0	1.6	4.8	280	110	61	REEL MASTER D 40mm x CL61
51	65	7.0	1.6	4.8	357	190	61	REEL MASTER D 51mm x CL61

RECOMMENDED FOR	Pressure domestic fuel reel hose for tank trucks and oil delivery in heavy duty reeling applications. Also suitable for tank cleaning.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord and two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +70°C.
BURST PRESSURE	48 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN 1360, EN 1761.
BRANDING TRANSFER LABEL	ESSENTIAL REEL MASTER D - 16 BAR Ω

ESSENTIAL BUNKER MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
76	94	9.0	1.6	4.8	532	300	40	BUNKER MASTER D 76mm x CL40
102	120	9.0	1.6	4.8	714	400	40	BUNKER MASTER D 102mm x CL40
127	145	9.0	1.6	4.8	889	490	40	BUNKER MASTER D 127mm x CL40
152	170	9.0	1.6	4.8	1064	500	40	BUNKER MASTER D 152mm x CL40
203	223	10.0	1.6	4.8	1421	850	40	BUNKER MASTER D 203mm x CL40
254	276	11.0	1.6	4.8	1778	1150	40	BUNKER MASTER D 254mm x CL40

RECOMMENDED FOR	Ship-to-shore oil bunker delivery hose for crude oil and liquid petroleum products with a maximum of 50% aromatic content, for tankers and bunkering vessels
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +90°C.
BURST PRESSURE	48 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
BRANDING TRANSFER LABEL	ESSENTIAL BUNKER MASTER D - 16 BAR Ω

PREMIUM TAR MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
25	39	7.0	1.8	7.2	175	110	40	TAR MASTER SD 25mm x CL40
32	47	7.5	1.8	7.2	224	140	40	TAR MASTER SD 32mm x CL40
38	54	8.0	1.8	7.2	266	180	40	TAR MASTER SD 38mm x CL40
51	67	8.0	1.8	7.2	357	250	40	TAR MASTER SD 51mm x CL40
63	81	9.0	1.4	5.6	441	340	40	TAR MASTER SD 63mm x CL40
76	95	9.5	1.4	5.6	532	420	40	TAR MASTER SD 76mm x CL40
102	123	10.5	1.4	5.6	714	610	40	TAR MASTER SD 102mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium hose designed for the bulk transfer and delivery of hot petroleum products, such as tar, asphalt, and oil. This hose is designed for suction and discharge.
TUBE	Acrylic rubber with outstanding resistance to hot oil.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix, static wire.
COVER	CR based rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +160°C, intermittent up to +180°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
BRANDING TRANSFER LABEL	PREMIUM TAR MASTER SD - HOT TAR & ASPHALT Ω

PREMIUM STEAM MASTER

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
13	25	6.0	1.8	18.0	91	50	40	STEAM MASTER 13mm x CL40
16	30	7.0	1.8	18.0	112	70	40	STEAM MASTER 16mm x CL40
19	33	7.0	1.8	18.0	133	80	40	STEAM MASTER 19mm x CL40
25	40	7.5	1.8	18.0	175	110	40	STEAM MASTER 25mm x CL40
32	48	8.0	1.8	18.0	224	150	40	STEAM MASTER 32mm x CL40
38	54	8.0	1.8	18.0	266	180	40	STEAM MASTER 38mm x CL40
51	67	8.0	1.8	18.0	357	230	40	STEAM MASTER 51mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium steam hose for the transport of pressurised saturated steam at +210°C up to a max. 18 bar working pressure or pressurised hot water.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	Two high tensile steel braids.
COVER	EPDM rubber, smooth, black, all sizes are pinpricked. Extremely weather resistant cover.
TEMPERATURE RANGE	-40°C to +210°C.
BURST PRESSURE	180 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN ISO 6134:2005-2A.
BRANDING TRANSFER LABEL	PREMIUM STEAM MASTER - EN ISO 6134:2005-2A STEAM 18 BAR 210°C Ω - DRAIN AFTER USE
BRANDING EMBOSSED LABEL	GATES PREMIUM STEAM MASTER - EN ISO 6134:2005-2A STEAM 18 BAR - DIAM mm - Ω – Q – year

PREMIUM STEAM MASTER RED

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
13	25	6.0	1.8	18.0	91	50	40	STEAM MASTER RED 13mm x CL40
16	30	7.0	1.8	18.0	112	70	40	STEAM MASTER RED 16mm x CL40
19	33	7.0	1.8	18.0	133	80	40	STEAM MASTER RED 19mm x CL40
25	40	7.5	1.8	18.0	175	110	40	STEAM MASTER RED 25mm x CL40
32	48	8.0	1.8	18.0	224	150	40	STEAM MASTER RED 32mm x CL40
38	54	8.0	1.8	18.0	266	180	40	STEAM MASTER RED 38mm x CL40
51	67	8.0	1.8	18.0	357	230	40	STEAM MASTER RED 51mm x CL40

RECOMMENDED FOR	Premium steam hose for the transport of pressurised saturated steam at +210°C up to a max. 18 bar working pressure or pressurised hot water.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	Two high tensile steel braids.
COVER	EPDM rubber, smooth, red, all sizes are pinpricked. Extremely weather resistant cover.
TEMPERATURE RANGE	-40°C to +210°C.
BURST PRESSURE	180 bar.
ELECTRICALLY CONDUCTIVE	Tube R < 10^6 Ohm.
STANDARDS	EN ISO 6134:2005-2A.
BRANDING TRANSFER LABEL	PREMIUM STEAM MASTER RED - EN ISO 6134:2005-2A STEAM 18 BAR 210°C - DRAIN AFTER USE
BRANDING EMBOSSED LABEL	GATES PREMIUM STEAM MASTER RED - EN ISO 6134:2005-2A STEAM 18 BAR - DIAM mm – Q – year

PREMIUM HEATER MASTER

			STEAM	WATER			kg		
mm	mm	mm	MPa	MPa	MPa	mm	kg/100m	m	Ref.
13	25	6.0	0.6	2.0	6.0	91	50	40	HEATER MASTER 13mm x CL40
16	30	7.0	0.6	2.0	6.0	112	60	40	HEATER MASTER 16mm x CL40
19	33	7.0	0.6	2.0	6.0	133	80	40	HEATER MASTER 19mm x CL40
25	40	7.5	0.6	2.0	6.0	175	90	40	HEATER MASTER 25mm x CL40
32	48	8.0	0.6	2.0	6.0	224	120	40	HEATER MASTER 32mm x CL40
38	54	8.0	0.6	2.0	6.0	266	140	40	HEATER MASTER 38mm x CL40
51	67	8.0	0.6	2.0	6.0	357	180	40	HEATER MASTER 51mm x CL40

RECOMMENDED FOR	Premium hot water (20 bar up to +90°C) delivery and steam hose up to +164°C, 6 bar working pressure in general industrial applications.
TUBE	Black EPDM, smooth.
REINFORCEMENT	High tensile textile cord.
COVER	EPDM rubber, smooth, black. Extremely weather resistant cover.
TEMPERATURE RANGE	-20°C to +164°C.
BURST PRESSURE	60 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	Exceeds BS 5122/A2.
BRANDING TRANSFER LABEL	PREMIUM HEATER MASTER - STEAM OPEN SYSTEM 6 BAR 164°C Ω

PREMIUM CHEM MASTER XLPE SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	31	6.0	1.6	4.8	95	70	40	CHEM MASTER XLPE SD 19mm x CL40
25	37	6.0	1.6	4.8	125	80	40	CHEM MASTER XLPE SD 25mm x CL40
32	44	6.0	1.6	4.8	160	100	40	CHEM MASTER XLPE SD 32mm x CL40
38	51	6.5	1.6	4.8	190	120	40	CHEM MASTER XLPE SD 38mm x CL40
50	66	8.0	1.6	4.8	250	210	40	CHEM MASTER XLPE SD 50mm x CL40
51	67	8.0	1.6	4.8	255	220	40	CHEM MASTER XLPE SD 51mm x CL40
65	81	8.0	1.6	4.8	325	260	40	CHEM MASTER XLPE SD 65mm x CL40
75	91	8.0	1.6	4.8	375	310	40	CHEM MASTER XLPE SD 75mm x CL40
76	92	8.0	1.6	4.8	380	310	40	CHEM MASTER XLPE SD 76mm x CL40
100	116	8.0	1.6	4.8	500	410	40	CHEM MASTER XLPE SD 100mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium hose for tank truck, barge, ship, or storage tank transfer applications of a variety of chemical products. The hose contains a wire helix for full suction capability, as well as for routing hoses through tight bends. A heavy duty suction and discharge hose (SD) for use with various acids and chemicals.
TUBE	XLPE, black smooth.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and crossing anti-static wires.
COVER	EPDM rubber, smooth, green. Extremely weather resistant cover.
TEMPERATURE RANGE	-20°C to +65°C.
BURST PRESSURE	> 48 bar.
BRANDING TRANSFER LABEL	PREMIUM CHEM MASTER XLPE SD – CHEMICAL TRANSFER 16 BAR

PREMIUM CHEM MASTER EPDM D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
13	25	6.0	1.6	6.4	91	50	40	CHEM MASTER EPDM D 13mm x CL40
19	31	6.0	1.6	6.4	133	60	40	CHEM MASTER EPDM D 19mm x CL40
22	34	6.0	1.6	6.4	154	70	40	CHEM MASTER EPDM D 22mm x CL40
25	37	6.0	1.6	6.4	175	70	40	CHEM MASTER EPDM D 25mm x CL40
32	44	6.0	1.6	6.4	224	90	40	CHEM MASTER EPDM D 32mm x CL40
38	51	6.5	1.6	6.4	266	120	40	CHEM MASTER EPDM D 38mm x CL40
50	66	8.0	1.6	6.4	350	180	40	CHEM MASTER EPDM D 50mm x CL40
51	67	8.0	1.6	6.4	357	180	40	CHEM MASTER EPDM D 51mm x CL40
63	79	8.0	1.6	6.4	441	220	40	CHEM MASTER EPDM D 63mm x CL40
75	91	8.0	1.6	6.4	525	260	40	CHEM MASTER EPDM D 75mm x CL40
76	92	8.0	1.6	6.4	532	270	40	CHEM MASTER EPDM D 76mm x CL40
100	116	8.0	1.6	6.4	700	350	40	CHEM MASTER EPDM D 100mm x CL40
102	118	8.0	1.6	6.4	714	350	40	CHEM MASTER EPDM D 101.5mm x CL40

RECOMMENDED FOR	Premium delivery hose (D) for handling a variety of chemical products such as acids, alkalis, esters and ketones with a medium or low concentration. Tank truck, barge, ship, or storage tank transfer of a variety of mild chemical products.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	High tensile synthetic textile cord with crossing anti-static wires.
COVER	CSM rubber, black, superior resistance to weather and abrasion, excellent chemical and oil resistance.
TEMPERATURE RANGE	-40°C to +95°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN 12115.
BRANDING TRANSFER LABEL	PREMIUM CHEM MASTER EPDM D - EN 12115 CHEMICAL TRANSFER 16 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM CHEM MASTER EPDM D - EN 12115 - EPDM - DIAM .. - 16 BAR - Ω – Q – year

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PREMIUM CHEM MASTER EPDM SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	31	6.0	1.6	6.4	95	70	40	CHEM MASTER EPDM SD 19mm x CL40
25	37	6.0	1.6	6.4	125	90	40	CHEM MASTER EPDM SD 25mm x CL40
32	44	6.0	1.6	6.4	160	100	40	CHEM MASTER EPDM SD 32mm x CL40
38	51	6.5	1.6	6.4	190	130	40	CHEM MASTER EPDM SD 38mm x CL40
50	66	8.0	1.6	6.4	250	220	40	CHEM MASTER EPDM SD 50mm x CL40
51	67	8.0	1.6	6.4	255	220	40	CHEM MASTER EPDM SD 51mm x CL40
63	79	8.0	1.6	6.4	315	280	40	CHEM MASTER EPDM SD 63mm x CL40
75	91	8.0	1.6	6.4	375	320	40	CHEM MASTER EPDM SD 75mm x CL40
76	92	8.0	1.6	6.4	380	330	40	CHEM MASTER EPDM SD 76mm x CL40
100	116	8.0	1.6	6.4	500	430	40	CHEM MASTER EPDM SD 100mm x CL40
102	118	8.0	1.6	6.4	508	430	40	CHEM MASTER EPDM SD 101.5mm x CL40
152	174	11.0	1.6	6.4	750	900	40	CHEM MASTER EPDM SD 150mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium suction and discharge hose (SD) for handling a variety of chemical products such as acids, alkalis, esters and ketones with a medium or low concentration. Tank truck, barge, ship, or storage tank transfer of a variety of mild chemical products.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix with crossing anti-static wires.
COVER	CSM rubber, black, superior resistance to weather and abrasion, excellent chemical and oil resistance.
TEMPERATURE RANGE	-40°C to +95°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN 12115.
BRANDING TRANSFER LABEL	PREMIUM CHEM MASTER EPDM SD - EN 12115 CHEMICAL TRANSFER 16 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM CHEM MASTER EPDM SD – EN 12115 - EPDM - DIAM .. - 16 BAR - Ω – Q - year

PREMIUM CHEM MASTER UHMWPE SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
13	23	5.0	1.6	6.4	65	40	40	CHEM MASTER UHMWPE SD 13mm x CL40
19	31	6.0	1.6	6.4	95	70	40	CHEM MASTER UHMWPE SD 19mm x CL40
25	37	6.0	1.6	6.4	125	80	40	CHEM MASTER UHMWPE SD 25mm x CL40
32	44	6.0	1.6	6.4	160	100	40	CHEM MASTER UHMWPE SD 32mm x CL40
38	51	6.5	1.6	6.4	190	120	40	CHEM MASTER UHMWPE SD 38mm x CL40
50	66	8.0	1.6	6.4	250	210	40	CHEM MASTER UHMWPE SD 50mm x CL40
51	67	8.0	1.6	6.4	255	220	40	CHEM MASTER UHMWPE SD 51mm x CL40
63	79	8.0	1.6	6.4	315	260	40	CHEM MASTER UHMWPE SD 63mm x CL40
75	91	8.0	1.6	6.4	375	310	40	CHEM MASTER UHMWPE SD 75mm x CL40
100	116	8.0	1.6	6.4	500	410	40	CHEM MASTER UHMWPE SD 100mm x CL40
102	118	8.0	1.6	6.4	508	420	40	CHEM MASTER UHMWPE SD 101.5mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Very universal suction and discharge hose (SD) capable of handling a wide spectrum of corrosive chemicals and acids. Tank truck, barge, ship, or storage tank transfer of a variety of chemical products. The hose contains a wire helix for full suction capability.
TUBE	UHMWPE, black, smooth and conductive.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and crossing anti-static wires.
COVER	CSM rubber, black, superior resistance to weather and abrasion, excellent chemical and oil resistance.
TEMPERATURE RANGE	-35°C to +100°C, suitable for steam at +130°C with intermittent usage.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	EN 12115.
BRANDING TRANSFER LABEL	PREMIUM CHEM MASTER UHMWPE SD - EN12115 CHEMICAL TRANSFER 16 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM CHEM MASTER UHMWPE SD – EN 12115 - UHMWPE - DIAM .. - 16 BAR - Ω – Q - year

PREMIUM DAIRY MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
32	44	6.0	1.0	3.0	160	100	40	DAIRY MASTER SD 32mm x CL40
38	50	6.0	1.0	3.0	190	120	40	DAIRY MASTER SD 38mm x CL40
40	52	6.0	1.0	3.0	200	130	40	DAIRY MASTER SD 40mm x CL40
45	59	7.0	1.0	3.0	225	150	40	DAIRY MASTER SD 45mm x CL40
51	65	7.0	1.0	3.0	255	200	40	DAIRY MASTER SD 51mm x CL40
63	77	7.0	1.0	3.0	315	240	40	DAIRY MASTER SD 63mm x CL40
76	90	7.0	1.0	3.0	380	310	40	DAIRY MASTER SD 76mm x CL40
102	118	8.0	1.0	3.0	510	480	40	DAIRY MASTER SD 102mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium vacuum and pressure hose (SD) for food products. Tank truck, barge, ship, or storage tank transfer of a variety of food products such as animal fat, vegetable oil and other edible oils requiring an FDA sanitary hose. Also suitable for ice cream and other dairy products.
TUBE	NBR based white food quality rubber, resistant to animal fat and vegetable oils.
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	NBR based rubber, blue, resistant to animal fat and vegetable oils.
TEMPERATURE RANGE	-30°C to +90°C, intermittent up to +130°C / 30 minutes for cleaning.
BURST PRESSURE	> 30 bar.
STANDARDS	FDA, BfR, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM DAIRY MASTER SD - FOOD 10 BAR

PREMIUM DAIRY MASTER LITE SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
32	43	5.5	1.0	3.0	88	87	40	DAIRY MASTER lite SD 32mm x CL40
38	49	5.5	1.0	3.0	104	101	40	DAIRY MASTER lite SD 38mm x CL40
40	51	5.5	1.0	3.0	110	105	40	DAIRY MASTER lite SD 40mm x CL40
45	56	5.5	1.0	3.0	124	120	40	DAIRY MASTER lite SD 45mm x CL40
51	63	6.0	1.0	3.0	140	145	40	DAIRY MASTER lite SD 51mm x CL40
63	76	6.5	1.0	3.0	173	182	40	DAIRY MASTER lite SD 63mm x CL40
76	89	6.5	1.0	3.0	209	216	40	DAIRY MASTER lite SD 76mm x CL40
102	116	7.0	1.0	3.0	306	351	40	DAIRY MASTER lite SD 102mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Very flexible corrugated vacuum and pressure hose (SD) for food products. Tank truck, barge, ship, or storage tank transfer of a variety of food products such as animal fat, vegetable oil and other edible oils requiring an FDA sanitary hose. Also suitable for ice cream and other dairy products.
TUBE	NBR based white food quality rubber, resistant to animal fat and vegetable oils.
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	NBR based rubber, blue, corrugated and resistant to animal fat and vegetable oils.
TEMPERATURE RANGE	-30°C to +90°C, intermittent up to +130°C / 30 minutes for cleaning.
BURST PRESSURE	> 30 bar.
STANDARDS	FDA, BfR, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM DAIRY MASTER LITE SD - FOOD 10 BAR

PREMIUM WASHDOWN MASTER

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
10	18	4.0	0.6	6.0	70	20	40	WASHDOWN MASTER 10mm x CL40
13	23	5.0	0.6	6.0	91	40	40	WASHDOWN MASTER 13mm x CL40
16	26	5.0	0.6	6.0	112	40	40	WASHDOWN MASTER 16mm x CL40
19	31	6.0	0.6	6.0	133	60	40	WASHDOWN MASTER 19mm x CL40
25	37	6.0	0.6	6.0	175	70	40	WASHDOWN MASTER 25mm x CL40
32	45	6.5	0.6	6.0	224	90	40	WASHDOWN MASTER 32mm x CL40
38	52	7.0	0.6	6.0	266	120	40	WASHDOWN MASTER 38mm x CL40
51	65	7.0	0.6	6.0	357	150	40	WASHDOWN MASTER 51mm x CL40

RECOMMENDED FOR	Premium hot water and open steam system washdown hose for the food and dairy industry. Used for paper mill, food handling or processing plant washdown service requiring a hose with a non-marking cover.
TUBE	EPDM based rubber, white, smooth.
REINFORCEMENT	High tensile textile cords.
COVER	EPDM based rubber, blue.
TEMPERATURE RANGE	-30°C to +164°C.
BURST PRESSURE	> 60 bar.
STANDARDS	FDA, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM WASHDOWN MASTER - FDA 6 BAR – STEAM OPEN SYSTEM

PREMIUM MILK MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
38	48	5.0	0.6	1.8	190	100	40	MILK MASTER SD 38mm x CL40
40	50	5.0	0.6	1.8	200	100	40	MILK MASTER SD 40mm x CL40
45	55	5.0	0.6	1.8	225	110	40	MILK MASTER SD 45mm x CL40
51	62	5.5	0.6	1.8	255	150	40	MILK MASTER SD 51mm x CL40
63	75	6.0	0.6	1.8	315	190	40	MILK MASTER SD 63mm x CL40
70	82	6.0	0.6	1.8	350	230	40	MILK MASTER SD 70mm x CL40
76	90	7.0	0.6	1.8	380	290	40	MILK MASTER SD 76mm x CL40
102	118	8.0	0.6	1.8	510	420	40	MILK MASTER SD 102mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium hose construction for filling and discharge in milk tanker applications.
TUBE	NR based white food quality rubber.
REINFORCEMENT	Synthetic, high tensile textile, 2 steel wire helix.
COVER	NR based rubber, blue.
TEMPERATURE RANGE	-30°C to +70°C, intermittent up to +120°C / 20 minutes for cleaning.
BURST PRESSURE	> 18 bar.
STANDARDS	FDA, BfR, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM MILK MASTER SD - FOOD 6 BAR

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PREMIUM BEVERAGE MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
13	21	4.0	1.6	4.8	91	30	40	BEVERAGE MASTER D 13mm x CL40
19	29	5.0	1.6	4.8	133	50	40	BEVERAGE MASTER D 19mm x CL40
25	37	6.0	1.6	4.8	175	70	40	BEVERAGE MASTER D 25mm x CL40
32	44	6.0	1.6	4.8	224	90	40	BEVERAGE MASTER D 32mm x CL40
38	51	6.5	1.6	4.8	266	110	40	BEVERAGE MASTER D 38mm x CL40
40	53	6.5	1.6	4.8	280	120	40	BEVERAGE MASTER D 40mm x CL40
51	65	7.0	1.6	4.8	357	160	40	BEVERAGE MASTER D 51mm x CL40
63	77	7.0	1.6	4.8	441	190	40	BEVERAGE MASTER D 63mm x CL40
76	92	8.0	1.6	4.8	532	260	40	BEVERAGE MASTER D 76mm x CL40
80	96	8.0	1.6	4.8	560	280	40	BEVERAGE MASTER D 80mm x CL40
102	118	8.0	1.6	4.8	714	330	40	BEVERAGE MASTER D 102mm x CL40

RECOMMENDED FOR	Premium pressure hose (D) for beer, ale, wines, alcohols (95%) and alcoholic beverages or liquid food. Transfer of milk, juice, soft drinks, pharmaceuticals, cosmetics or water-based products requiring an FDA sanitary hose.
TUBE	CR/NR based white food quality rubber, oil and fat resistant (max.40%), odor- and tasteless.
REINFORCEMENT	Synthetic, high tensile textile.
COVER	EPDM red, ozone and chemicals resistant with cloth impression.
TEMPERATURE RANGE	-30°C to +90°C intermittent up to +130°C / 30 minutes for cleaning.
BURST PRESSURE	> 30 bar.
STANDARDS	FDA and BfR, ADI-free.
BRANDING TRANSFER LABEL	PREMIUM BEVERAGE MASTER D - BEER & WINE 16 BAR

ESSENTIAL WATER MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
25	35	5.0	1.0	3.0	175	60	40	WATER MASTER D 25mm x CL40
25	35	5.0	1.0	3.0	175	60	61*	WATER MASTER D 25mm x CL61
32	42	5.0	1.0	3.0	224	70	40	WATER MASTER D 32mm x CL40
32	42	5.0	1.0	3.0	224	70	61*	WATER MASTER D 32mm x CL61
38	48	5.0	1.0	3.0	266	90	40	WATER MASTER D 38mm x CL40
51	63	6.0	1.0	3.0	357	140	40	WATER MASTER D 51mm x CL40
51	63	6.0	1.0	3.0	357	140	61*	WATER MASTER D 51mm x CL61
63	76	6.5	1.0	3.0	441	180	40	WATER MASTER D 63mm x CL40
63	76	6.5	1.0	3.0	441	180	61*	WATER MASTER D 63mm x CL61
76	89	6.5	1.0	3.0	532	220	40	WATER MASTER D 76mm x CL40
102	116	7.0	1.0	3.0	714	300	40	WATER MASTER D 102mm x CL40
102	116	7.0	1.0	3.0	714	300	61*	WATER MASTER D 102mm x CL61
127	142	7.5	1.0	3.0	889	400	40	WATER MASTER D 127mm x CL40
152	169	8.5	1.0	3.0	1064	550	40	WATER MASTER D 152mm x CL40
203	224	10.5	1.0	3.0	1421	950	40	WATER MASTER D 203mm x CL40

* 61 m coils are made to order

RECOMMENDED FOR	Pressure hose (D) for water, waste water, sea water, mud, slurry. Water discharge in heavy duty service requiring a compact, rugged and lightweight hose.
TUBE	Black EPDM, smooth.
REINFORCEMENT	Synthetic, high tensile textile cord.
COVER	EPDM rubber, black, good weather and aging resistance.
TEMPERATURE RANGE	-35°C to +95°C.
BURST PRESSURE	> 30 bar.
BRANDING TRANSFER LABEL	ESSENTIAL WATER MASTER D - 10 BAR

ESSENTIAL WATER MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
25	35	5.0	1.0	3.0	125	70	40	WATER MASTER SD 25mm x CL40
25	35	5.0	1.0	3.0	125	70	61*	WATER MASTER SD 25mm x CL61
32	42	5.0	1.0	3.0	160	90	40	WATER MASTER SD 32mm x CL40
32	42	5.0	1.0	3.0	160	90	61*	WATER MASTER SD 32mm x CL61
38	48	5.0	1.0	3.0	190	110	40	WATER MASTER SD 38mm x CL40
38	48	5.0	1.0	3.0	190	110	61*	WATER MASTER SD 38mm x CL61
51	63	6.0	1.0	3.0	255	160	40	WATER MASTER SD 51mm x CL40
51	63	6.0	1.0	3.0	255	160	61*	WATER MASTER SD 51mm x CL61
63	76	6.5	1.0	3.0	315	230	40	WATER MASTER SD 63mm x CL40
63	76	6.5	1.0	3.0	315	230	61*	WATER MASTER SD 63mm x CL61
76	89	6.5	1.0	3.0	380	280	40	WATER MASTER SD 76mm x CL40
76	89	6.5	1.0	3.0	380	280	61*	WATER MASTER SD 76mm x CL61
102	116	7.0	1.0	3.0	510	390	40	WATER MASTER SD 102mm x CL40
102	116	7.0	1.0	3.0	510	390	61*	WATER MASTER SD 102mm x CL61
127	142	7.5	1.0	3.0	635	570	40	WATER MASTER SD 127mm x CL40
152	169	8.5	1.0	3.0	760	800	40	WATER MASTER SD 152mm x CL40
203	224	10.5	1.0	3.0	1015	1290	40	WATER MASTER SD 203mm x CL40

* 61 m coils are made to order ** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Vacuum and pressure hose (SD) for water, waste water, sea water, mud, slurry. Water suction in heavy duty service requiring a compact, rugged and light weight hose.
TUBE	Black EPDM, smooth.
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	EPDM rubber, black, good weather and aging resistance.
TEMPERATURE RANGE	-35°C to +95°C.
BURST PRESSURE	> 30 bar.
BRANDING TRANSFER LABEL	ESSENTIAL WATER MASTER SD - 10 BAR

GP80 PLUS

mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	Ref.
6	13.0	3.7	11.0	35	760	13	GP80+ - 6mm
8	15.0	3.7	11.0	50	760	16	GP80+ - 8mm
10	17.0	3.7	11.0	60	760	20	GP80+ - 10mm
13	20.5	3.7	11.0	70	635	26	GP80+ - 13mm
16	24.2	3.0	9.0	90	500	33	GP80+ - 16mm
19	29.0	3.0	9.0	110	500	47	GP80+ - 19mm
25	35.6	3.0	9.0	130	500	61	GP80+ - 25mm
32	42.8	3.0	9.0	200	250	75	GP80+ - 32mm
38	51.0	3.0	9.0	300	250	101	GP80+ - 38mm
51	64.0	3.0	9.0	500	125	144	GP80+ - 50mm

RECOMMENDED FOR	General industrial applications such as oil, alcohols, aqueous solutions, hydraulic fluids, acids, detergents and chemicals. Static conductive for more security.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One or two fibre braids.
COVER	NBR/PVC based.
TEMPERATURE RANGE	-40°C to +100°C
STANDARDS	Gates proprietary.
COUPLINGS	-4 to -20: MegaCrimp; -24 to -32: GlobalSpiral Plus.

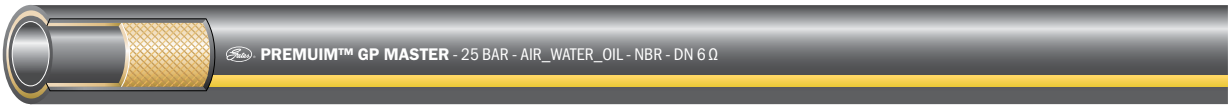
LOCK-ON PLUS

mm	"	mm	MPa	MPa	mm	mm/Hg	kg/100m	Ref.
6	1/4	11.9	2.1	8.4	45	710	13	LOLA+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLA+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLA+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLA+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLA+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLB+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLB+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLB+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLB+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLB+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLC+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLC+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLC+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLC+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLC+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLG+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLG+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLG+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLG+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLG+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLR+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLR+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLR+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLR+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLR+12

LOCK-ON PLUS

RECOMMENDED FOR	Petroleum-based hydraulic oils, antifreeze solutions, water, hot lubricating oils and air. Suitable for low-pressure cleaning and pneumatic systems, return lines and low pressure lines. Lock-On hose and couplings are not recommended for pressure surge applications or critical applications.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One fibre braid.
COVER	NBR/PVC based.
TEMPERATURE RANGE	-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.
STANDARDS	Gates proprietary.
COUPLINGS	Lock-On Plus reusable couplings.
CHARACTERISTICS/BENEFIT	Available in 5 colours for easy colour coding. Easy to assemble. A = black R = red B = blue C = grey G = green

PREMIUM GP MASTER



mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
6	14	4.0	2.5	8.0	50	17	60	GP MASTER 6mm x CL60
8	16	4.0	2.5	8.0	50	21	60	GP MASTER 8mm x CL60
10	18	4.0	2.5	8.0	75	24	60	GP MASTER 10mm x CL60
13	21	4.0	2.5	8.0	100	30	60	GP MASTER 13mm x CL60
16	25	4.5	2.5	8.0	125	40	60	GP MASTER 16mm x CL60
19	29	5.0	2.5	8.0	125	54	60	GP MASTER 19mm x CL60
25	37	6.0	2.5	8.0	200	83	60	GP MASTER 25mm x CL60

RECOMMENDED FOR	Applications requiring a premium grade spiralled hose with excellent flexibility and maximum resistance to compressor air, water, gasoline, fuel oil and lubricant oils. Suitable for 20% biodiesel blends.
TUBE	Black NBR, smooth, conductive.
REINFORCEMENT	Textile layers, spiralled.
COVER	CR rubber, smooth cover, excellent resistance to weather and abrasion, good chemical and oil resistance, 1 extruded yellow longitudinal stripe.
TEMPERATURE RANGE	-40°C to +95°C.
BURST PRESSURE	> 3.15 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
INKJET LABEL	PREMIUM GP MASTER - 25 BAR - AIR_WATER_OIL NBR - DN .. Ω

GP60

mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	Ref.
6	13.0	2.0	6.0	45	760	13	GP60 - 6mm
8	15.0	2.0	6.0	65	760	16	GP60 - 8mm
10	17.0	2.0	6.0	75	760	20	GP60 - 10mm
13	20.5	2.0	6.0	100	635	26	GP60 - 13mm
16	24.2	2.0	6.0	115	500	33	GP60 - 16mm
19	29.0	2.0	6.0	135	500	47	GP60 - 19mm
25	35.6	2.0	6.0	165	500	61	GP60 - 25mm

RECOMMENDED FOR	Hot water washdown applications up to +100°C, general industrial applications such as oil and hydraulic fluids (+100°C), alcohols and aqueous solutions.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One fibre braid.
COVER	NBR/PVC based.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Gates proprietary.
COUPLINGS	MegaCrimp.

PREMIUM MULTI MASTER

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
6	13	3.5	2.0	8.0	50	14	100	MULTI MASTER 6mm x CL100
8	15	3.5	2.0	8.0	50	18	100	MULTI MASTER 8mm x CL100
10	17	3.5	2.0	8.0	75	21	100	MULTI MASTER 10mm x CL100
13	21	4.0	2.0	8.0	100	29	100	MULTI MASTER 13mm x CL100
16	25	4.5	2.0	8.0	125	40	50	MULTI MASTER 16mm x CL50
19	29	5.0	2.0	8.0	125	53	50	MULTI MASTER 19mm x CL50
25	37	6.0	2.0	8.0	200	83	50	MULTI MASTER 25mm x CL50
32	44	6.0	2.0	7.0	250	99	30	MULTI MASTER 32mm x CL30
38	50	6.0	2.0	7.0	300	115	30	MULTI MASTER 38mm x CL30

RECOMMENDED FOR	Premium multi-purpose hose for air and water applications requiring maximum flexibility in any industry, including mining, construction, agriculture, vehicle repair and in-plant operations. Outstanding resistance to heat and ozone. Suitable for light agricultural spraying, such as diluted solutions of herbicides.
TUBE	Black EPDM, smooth.
REINFORCEMENT	Textile layers, spiralled.
COVER	EPDM rubber, smooth with 1 blue extruded longitudinal stripe.
TEMPERATURE RANGE	-40°C to +100°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
INKJET LABEL	PREMIUM MULTI MASTER - 20 BAR - AIR_WATER - EPDM - DN.. Ω

PLANT MASTER XTREME 250

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
6	1/4	12.7	1.7	5.2	50	760	13	Plant Master Xtreme 250 1/4"
10	3/8	16.8	1.7	5.2	75	760	20	Plant Master Xtreme 250 3/8"
13	1/2	21.6	1.7	5.2	100	635	33	Plant Master Xtreme 250 1/2"
16	5/8	24.9	1.7	5.2	130	510	39	Plant Master Xtreme 250 5/8"
19	3/4	29.2	1.7	5.2	130	510	52	Plant Master Xtreme 250 3/4"
25	1	37.3	1.7	5.2	200	250	82	Plant Master Xtreme 250 1"
32	1.1/4	44.5	1.7	5.2	250	250	98	Plant Master Xtreme 250 1 1/4"
38	1.1/2	50.8	1.7	5.2	300	250	115	Plant Master Xtreme 250 1 1/2"

RECOMMENDED FOR	Applications requiring a premium grade spiral hose with excellent flexibility and maximum resistance to air, water, petroleum oils and lubricating oils (up to +100°C). Recommended for gasoline, kerosene and fuel oil transfer only (up to +48°C). Excellent weather and ozone resistance.
TUBE	NBR (Nitrile) based, black.
REINFORCEMENT	Synthetic, high tensile cord.
COVER	Modified nitrile, red.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Gates proprietary.
CHARACTERISTICS/BENEFITS	Non-conductive at 1000 volts DC. Meets electrical resistance of one Megaohm per inch when subjected to 1000 volts DC. Storage and use may adversely affect electrical properties.
BRANDING	Gates Plant Master Xtreme 250 Multi-Purpose 3/8 Inch (9.5mm) 250 psi (1.72MPa) WP Non-Conductive at 1000V DC (>1 MEGOHM/IN.) Made in USA

GP40

mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	Ref.
6	12.0	1.3	4.0	45	760	11	GP40 - 6mm
8	15.0	1.3	4.0	65	760	16	GP40 - 8mm
10	17.0	1.3	4.0	75	760	19	GP40 - 10mm
13	20.5	1.3	4.0	90	635	25	GP40 - 13mm
16	24.0	1.3	4.0	115	500	31	GP40 - 16mm
19	28.0	1.3	4.0	135	500	46	GP40 - 19mm
25	35.0	1.3	4.0	180	250	61	GP40 - 25mm
32	44.0	1.3	4.0	200	250	93	GP40 - 32mm
38	51.0	1.3	4.0	300	250	120	GP40 - 38mm

RECOMMENDED FOR	General air service up to +80°C and general water service up to +100°C and applications requiring maximum flexibility and high abrasion resistance. Resistant to ozone and weather influences.
TUBE	EPDM based.
REINFORCEMENT	One or two textile layers.
COVER	EPDM based.
TEMPERATURE RANGE	-40°C to +100°C constant and +121°C intermittent.
STANDARDS	Gates proprietary.
COUPLINGS	-4 to -20: MegaCrimp; -24: GlobalSpiral Plus.

ESSENTIAL SANDBLAST MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	34	7.5	1.2	4.8	133	80	40	SANDBLAST MASTER D 19mm x CL40
25	40	7.5	1.2	4.8	175	100	40	SANDBLAST MASTER D 25mm x CL40
32	48	8.0	1.2	4.8	224	120	40	SANDBLAST MASTER D 32mm x CL40
38	56	9.0	1.2	4.8	266	150	40	SANDBLAST MASTER D 38mm x CL40

RECOMMENDED FOR	Hose for sandblasting of metal castings, steel, stone, sand and cement wherever abrasive materials are carried at a high velocity.
TUBE	NR/BR based, black, anti-static.
REINFORCEMENT	High tensile synthetic textile cord.
COVER	NR/BR based, anti-static, resistant to weather and abrasion.
TEMPERATURE RANGE	-40°C to +75°C.
BURST PRESSURE	> 48 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	DIN 53516: ~55 mm3.
BRANDING TRANSFER LABEL	ESSENTIAL SANDBLAST MASTER D - 12 BAR

ESSENTIAL CEMENT MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
51	65	7.0	0.8	2.4	357	160	40	CEMENT MASTER D 51mm x CL40
63	79	8.0	0.8	2.4	441	220	40	CEMENT MASTER D 63mm x CL40
76	94	9.0	0.8	2.4	532	290	40	CEMENT MASTER D 76mm x CL40
80	98	9.0	0.8	2.4	560	310	40	CEMENT MASTER D 80mm x CL40
90	110	10.0	0.8	2.4	630	380	40	CEMENT MASTER D 90mm x CL40
102	122	10.0	0.8	2.4	714	410	40	CEMENT MASTER D 102mm x CL40
110	130	10.0	0.8	2.4	770	440	40	CEMENT MASTER D 110mm x CL40

RECOMMENDED FOR	Pressure hose (D) for pneumatic transport of dry cement, slurries, dust, limestone, wood chips, coal, sand, gravel, ground slate, asphalt roofing chips, metal shavings. Contains a static-conducting black rubber in the tube and a ground wire in the hose wall for static charge dissipation.
TUBE	Black, anti-static NR/BR based rubber.
REINFORCEMENT	High tensile synthetic textile cord, static wire.
COVER	Black, anti-static NR/SBR based rubber, resistant to weather and abrasion.
TEMPERATURE RANGE	-20°C to +80°C.
BURST PRESSURE	> 24 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	DIN 53516.
BRANDING TRANSFER LABEL	ESSENTIAL CEMENT MASTER D - 8 BAR

ESSENTIAL CEMENT MASTER SD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
51	67	8.0	0.8	2.4	255	220	40	CEMENT MASTER SD 51mm x CL40
63	81	9.0	0.8	2.4	315	300	40	CEMENT MASTER SD 63mm x CL40
76	96	10.0	0.8	2.4	380	400	40	CEMENT MASTER SD 76mm x CL40
80	100	10.0	0.8	2.4	400	420	40	CEMENT MASTER SD 80mm x CL40
90	110	10.0	0.8	2.4	450	460	40	CEMENT MASTER SD 90mm x CL40
102	122	10.0	0.8	2.4	510	530	40	CEMENT MASTER SD 102mm x CL40
110	132	11.0	0.8	2.4	550	650	40	CEMENT MASTER SD 110mm x CL40
127	149	11.0	0.8	2.4	635	800	40	CEMENT MASTER SD 127mm x CL40
152	175	11.5	0.8	2.4	760	970	40	CEMENT MASTER SD 152mm x CL40
203	228	12.5	0.8	2.4	1015	1480	40	CEMENT MASTER SD 203mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Vacuum and pressure hose (SD) for pneumatic transport of dry cement, slurries, dust, limestone, wood chips, coal, sand, gravel, ground slate, asphalt roofing chips, metal shavings. Contains a static-conducting black rubber in the tube and a ground wire in the hose wall for static charge dissipation.
TUBE	Black, anti-static NR/BR based rubber.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix, static wires.
COVER	Black, anti-static NR/SBR based rubber, resistant to weather and abrasion.
TEMPERATURE RANGE	-20°C to +80°C.
BURST PRESSURE	> 24 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	DIN 53516.
BRANDING TRANSFER LABEL	ESSENTIAL CEMENT MASTER SD - 8 BAR

ESSENTIAL SILO MASTER D - FOOD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
51	65	7.0	0.8	2.4	357	150	40	SILO MASTER D - FOOD 51mm x CL40
63	81	9.0	0.8	2.4	441	240	40	SILO MASTER D - FOOD 63mm x CL40
76	96	10.0	0.8	2.4	532	310	40	SILO MASTER D - FOOD 76mm x CL40
80	100	10.0	0.8	2.4	560	330	40	SILO MASTER D - FOOD 80mm x CL40
90	110	10.0	0.8	2.4	630	370	40	SILO MASTER D - FOOD 90mm x CL40
102	122	10.0	0.8	2.4	714	390	40	SILO MASTER D - FOOD 102mm x CL40
110	132	11.0	0.8	2.4	770	450	40	SILO MASTER D - FOOD 110mm x CL40

RECOMMENDED FOR	Pressure hose (D) for pneumatic transport of abrasive bulk food materials such as plastic granules, grain and sugar.
TUBE	White, NR/BR based rubber.
REINFORCEMENT	High tensile synthetic textile cord, static wire.
COVER	Black, anti-static NR/BR based rubber, resistant to weather and abrasion.
TEMPERATURE RANGE	-20°C to +80°C.
BURST PRESSURE	> 24 bar.
STANDARDS	FDA.
BRANDING TRANSFER LABEL	ESSENTIAL SILO MASTER D - FOOD 8 BAR

ESSENTIAL SILO MASTER SD - FOOD

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
51	67	8.0	0.8	2.4	204	210	40	SILO MASTER SD - FOOD 51mm x CL40
63	81	9.0	0.8	2.4	252	280	40	SILO MASTER SD - FOOD 63mm x CL40
76	96	10.0	0.8	2.4	304	370	40	SILO MASTER SD - FOOD 76mm x CL40
80	100	10.0	0.8	2.4	320	380	40	SILO MASTER SD - FOOD 80mm x CL40
90	110	10.0	0.8	2.4	360	430	40	SILO MASTER SD - FOOD 90mm x CL40
102	122	10.0	0.8	2.4	408	520	40	SILO MASTER SD - FOOD 102mm x CL40
110	132	11.0	0.8	2.4	440	620	40	SILO MASTER SD - FOOD 110mm x CL40

** Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Vacuum and pressure hose (SD) for pneumatic transport of abrasive bulk food materials such as plastic granules, grain and sugar.
TUBE	White, NR/BR based rubber.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix, static wire.
COVER	Black, NR/BR based rubber, resistant to weather and abrasion.
TEMPERATURE RANGE	-20°C to +80°C.
BURST PRESSURE	> 24 bar.
STANDARDS	FDA.
BRANDING TRANSFER LABEL	ESSENTIAL SILO MASTER SD - FOOD 8 BAR

ESSENTIAL CONCRETE MASTER D

mm	mm	mm	MPa	MPa	mm	kg/100m	m	Ref.
19	31	6.0	4.0	12.0	133	50	40	CONCRETE MASTER D 19mm x CL40
25	39	7.0	4.0	12.0	175	80	40	CONCRETE MASTER D 25mm x CL40
32	47	7.5	4.0	12.0	224	100	40	CONCRETE MASTER D 32mm x CL40
35	50	7.5	4.0	12.0	245	110	40	CONCRETE MASTER D 35mm x CL40
38	54	8.0	4.0	12.0	266	130	40	CONCRETE MASTER D 38mm x CL40
50	68	9.0	4.0	12.0	350	190	40	CONCRETE MASTER D 50mm x CL40
63	83	10.0	4.0	12.0	441	270	40	CONCRETE MASTER D 63mm x CL40

RECOMMENDED FOR	Concrete pump hose for abrasive substances such as concrete mortar, cement, plaster, grout and cement applications, handling a multitude of materials being pumped to concrete structures, tunnel faces, swimming pools.
TUBE	Black, anti-static NR/BR/SBR based rubber.
REINFORCEMENT	High tensile synthetic textile cord.
COVER	Black, anti-static NR/SBR based rubber, resistant to weather and abrasion.
TEMPERATURE RANGE	-20°C to +70°C.
BURST PRESSURE	> 120 bar.
ELECTRICALLY CONDUCTIVE	R < 10^6 Ohm.
STANDARDS	DIN 53516: ~70 mm3.
BRANDING TRANSFER LABEL	ESSENTIAL CONCRETE MASTER D - 40 BAR

DEMAND MORE
DEMAND GATES

WHATEVER THE PART
WHATEVER THE TIME
WHATEVER THE CONDITIONS

GATES BLACK GOLD™ OILFIELD PRODUCTS

In the toughest of conditions, oil rig operatives need parts that won't let them down, from a supplier that won't let them down. One that will not fail under pressure.

They need a provider like Gates: because when our customers demand more, we deliver – every time. With unsurpassed quality, in industry-leading lead times.

RECEIVE UNPARALLELED QUALITY

At Gates, we prioritise quality and safety above all else. Our products undergo rigorous on-site testing to ensure uncompromising quality, providing you with the peace of mind you deserve.

With the understanding that failure is not an option in demanding, high-performance applications, our API-certified products are designed to meet these needs continuously, day and night.

Trust in the Gates Black Gold legacy to deliver excellence in performance and safety.

RECEIVE UNMATCHED SPEED

We understand that quality alone is not enough; prompt delivery is crucial. That is why our commitment to innovative technology is at the centre of everything we do: our cutting-edge retroactive bonding (RAB) technology allows us to shorten lead times considerably.

Increase your uptime and productivity with standard delivery times that are faster than our competitors. Products delivered at the right time, every time.

RECEIVE UNCOMPROMISING RELIABILITY

In the realm of offshore oil rig operations, where demands are high, it's reassuring to have a nearby supplier that can precisely meet your needs when you need it most.

Our strong global presence is rooted in a regional approach that allows you to benefit from the proximity of production and service facilities worldwide.

You can rely on a close-by parts provider without compromising on expertise, which remains unmatched in the industry.

Find an overview of our product range in the following pages.
The full catalogue (E2 /40041) is available from **gates.com**

HIGH PRESSURE - OILFIELD HOSE ASSEMBLIES

Mud & Cement Hose Assemblies (API 7K)
Rotary & Vibrator Hose Mud Bonded

Mud & Cement Hose Assemblies (API 7K)
Rotary & Vibrator Hose Mud Crimped

Mud & Cement Hose Assemblies (API 7K)
Rotary & Vibrator Hose Cement Bonded

Mud & Cement Hose Assemblies (API 7K)
Rotary & Vibrator Hose Cement Bonded

Mud & Cement Hose Assemblies (API 7K)
Rotary & Vibrator Hose Cement Crimped Powerspiral

Choke and Kill & Well-control
Hose Assemblies (API 16C)

Hydraulic Tensioner & Compensator Hose Assemblies

Frac Hose Assemblies

Blowout Preventer
Hose Megashield™ 5000 Hose Assemblies

QC47 Coupling
QC47 Quick Connect Coupling

LOW PRESSURE - TRANSFER HOSE ASSEMBLIES

Low Pressure Oilfield Hose
Flameshield

Water (Discharge)
Black Gold Drill Water 300D

Water (Suction/Discharge)
Black Gold Drill Water 300SD

Oilfield Service
Black Gold™ Oilfield Service 400D

Petroleum Transfer (Discharge)
Black Gold Fuel 300D

Petroleum Transfer (Suction/Discharge)
Black Gold Fuel 300SD

Material Handling (Discharge)
Black Gold Mud & Oil 300D

Material Handling (Suction/Discharge)
Black Gold Mud & Oil 300SD

Material Handling (Discharge)
Black Gold Bulk Material 300D

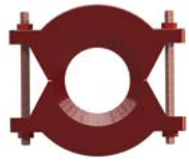
Material Handling (Suction/Discharge)
Black Gold Bulk Material 300SD

Material Handling (Discharge)
Black Gold Potable Water 300D

Material Handling (Suction/Discharge)
Black Gold Potable Water 300SD

END CONNECTION OPTIONS

API Hub Clamp



Hammer Unions

API Hub

API Flange Ends

To find out more about our rotary hose offering please go to our website
GATES.COM/GB/EN/INDUSTRIES/OIL-GAS

CHEMICAL RESISTANCE TABLE

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1 = Preferred - Constant Contact
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X = Not Recommended
- = No Data

NOTE: RATINGS ARE FOR THE AFFECT ON THE POLYMER ONLY!

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS					
		TEFLON®	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON®	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
A																					
Absorption Oil	Liquid	1	2	2	X	1	X	X	2	X	1	2	1	1	-	-	-	-	-	1	-
Acetal	Colorless Liquid	1	1	1	1	-	-	-	-	1	X	-	1	-	-	-	-	-	-	1	-
Acetaldehyde	Colorless Liquid	1	1	1	1	X	2	2	X	1	X	X	1	2	X	1	1	1	1	1	1
Acetamide	Liquid above 176°F(80°C)	1	1	2	2	2	X	X	2	2	X	-	1	-	-	-	2	-	1	X	-
Acetic Acid (40% or less)	Clear Colorless Liquid	1	1	1	1	X	2	X	2	1	X	2	1	-	-	X	2	2	2	X	2
Acetic Acid (56% or less)	Clear Colorless Liquid	1	1	1	1	X	2	X	2	1	X	2	1	X	2	X	2	2	2	X	2
Acetic Acid (85% or less)	Clear Colorless Liquid	1	1	1	2	X	2	X	X	X	X	X	X	X	X	-	2	2	-	-	X
Acetic Acid (Glacial - 99.4%)	Clear Colorless Liquid	1	1	X	X	X	2	X	X	X	X	X	1	X	X	-	2	2	-	-	X
Acetic Acid, Anhydride	Clear Colorless Liquid	1	-	X	-	X	X	X	X	2	-	2	1	X	X	-	2	2	-	-	X
Acetic Anhydride (Acetic Oxide)	Colorless Liquid	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetic Ether (Ethyl Acetate)	Colorless Liquid	1	1	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	2
Acetic Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	-	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetone (Dimethylketone)	Colorless Liquid	1	1	X	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	2
Acetone Cyanohydrin	Colorless Liquid	1	1	2	2	-	X	X	-	2	-	-	2	-	-	-	-	-	-	-	-
Acetonitrile (Methyl Cyanide)	Colorless Liquid	1	1	2	X	X	2	2	2	2	-	2	1	-	1	-	-	-	-	-	-
Acetophenone	Colorless Liquid	1	2	2	1	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-	2
Acetyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acetyl Oxide (Acetic Anhydride)	Colorless Liquid	1	1	1	1	X	X	X	-	2	X	2	1	X	X	X	2	2	2	X	X
Acetyl-P-Toluidine (In Ether or Alcohols)	In Alcohol or Ether	1	1	1	1	-	X	X	-	2	X	-	1	-	-	-	-	-	-	-	-
Acetylene	Gas	NO HOSE AVAILABLE														-	-	-	-	-	-
Acetylene Dichloride (Dichloroethylene)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	X
Acetylene Tetrachloride (Tetrachloroethane)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	-
Acrolein (Hydroquinone Inhibited)	Colorless to Yellow Liquid	1	1	1	X	-	-	-	-	2	X	-	-	-	-	-	-	-	-	-	-
Acrylamide	Colorless Crystals	1	1	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylates (HEA or HPA)	Colorless Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Acrylic Acid	Colorless Liquid	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylic Acid (Glacial 97%)	Colorless Liquid	1	1	1	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Acrylic Emulsion	Liquid	1	1	1	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	Colorless Liquid	1	2	2	X	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	-
Adipic Acid (70°F)	White Crystals	1	1	X	1	X	X	1	X	-	1	-	-	X	X	-	-	-	-	-	-
Aeroshell 7A, 17 Grease	Liquid	1	-	-	-	1	-	-	2	-	-	-	-	-	-	1	1	1	1	-	-
Air, 212°F (100°C)	Colorless Gas	1	1	2	1	1	2	X	1	1	1	1	1	X	2	1	1	1	1	1	-
Air, 257°F (125°C)	Colorless Gas	1	1	X	1	X	X	X	2	1	1	1	1	X	X	-	-	-	-	-	-
Air, 300°F (149°C)	Colorless Gas	1	1	X	1	X	X	X	X	1	1	X	X	X	X	-	-	-	-	-	-
Air, Ambient	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aircraft Hyd. Oil AA	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-
Alachlor (Lasso)	Colorless Crystals	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-
Alkaline Liquid (NOS)	In Water Solutions	1	1	1	1	-	-	-	-	1	2	-	1	-	-	-	-	-	-	-	-
Alkyaryl Polyether Alcohol	-	1	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Alkyd Resin (Thermosetting Polymer)	Varies	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkylaryl Sulfonate (Alkylbenzene Sulfonate)	Powder	1	1	1	-	1	-	1	-	-	1	X	1	-	-	1	1	-	-	-	-
Allomalaic Acid (Fumaric Acid) Solution	Liquid	1	1	-	2	1	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-
Allyl Alcohol	Colorless Liquid	1	1	1	1	1	-	1	1	1	1	1	1	X	X	-	-	-	-	-	-
Allyl Bromide	Colorless to Yellow Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allyl Chloride	Colorless Liquid	1	1	X	X	X	X	X	X	X	1	-	2	1	X	-	1	1	-	-	2
Alpha Methylstyrene	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	-	X	1	X	-	-	-	-	-	-
Alpha Olefin Sulfonate	Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha Picoline	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alum (Aluminum Sulphate or Other)	White Crystals	1	1	-	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1
Alum, Potash (Aluminum Potassium Sulfate)	White Crystals	1	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	2	X	X	1
Alumina - Calcined (Conveyed Pneumatically)	Granular	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Alumina Trihydrate (Conveyed Pnuematically)	White Crystalline Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum Acetate	White Powder	1	1	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1	-	X	-
Aluminum Alkyl (ie Triethylaluminum)	Colorless Liquid	X	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Aluminum Bromide	White to Yellow Crystals	1	1	-	1	1	1	1	1	1	1	1	-	-	-	X	2	2	-	X	-
Aluminum Chloride Solution	White to Yellow Solution	1	1	X	1	1	1	1	-	1	1	-	1	-	-	X	2	2	X	X	1
Aluminum Chloride, Anhydrous	White to Yellow Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum Chlorohydrate Solution (Up to 50%)	White Solution	1	1	1	1	1	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Aluminum Fluoride	White Crystals	1	1	-	-	-	-	1	1	-	-	-	-	-	1	X	2	2	2	X	1
Aluminum Formate (Di & Tri In Water)	In Hot Water	1	1	1	1	1	X	X	-	1	1	-	1	-	-	-	-	-	-	-	-
Aluminum Hydroxide (Alumina Trihydrate)	In Mineral Acid or Caustic Soda	1	1	1	-	X	X	X	1	1	1	-	1	X	X	-	1	1	-	1	1
Aluminum Nitrate	In Cold Water	1	1	1	1	1	1	1	1	1	1	1	1	-	1	X	1	1	2	-	1
Aluminum Phosphate Solution	In HCl or HNO3 (slightly soluble)	1	1	1	-	X	X	X	X	-	1	-	-	X	X	-	-	-	-	-	-
Aluminum Salts	Varies	1	1	-	1	1	1	1	1	1	-	1	-	-	1	-	2	2	2	-	1
Aluminum Sulfate	White Crystals	1	1	-	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1
Aluminum Sulfate Solution	In Water	1	1	1	1	1	1	1	-	1	1	-	1	-	-	X	X	2	X	X	1
Aluminum Sulfate Solution (49.7% H2O)	Liquid	1	1	1	1	1	1	1	1	1	1	-	1	1	1	X	X	2	X	X	1
Amines (A class of Organic Compounds)	Varies	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amines (Aromatic - IE P-Toluidine)	White Plates (Solid)	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Amines (Mixed)	Varies	1	2	-	2	2	2	2	2	2	X	-	-	-	-	-	1	-	X	X	-
Amines (Primary, Secondary, Tertiary, Etc)	Varies	1	2	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Aminodiphenylamine	Purple Powder	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aminoethanol (Ethanolamine)	Colorless Viscous Liquid	1	2	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-
Aminoethylethanolamine	Liquid	1	2	1	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-
Ammonia (Anhydrous)	Gas or liquid	NO HOSE AVAILABLE														-	-	-	-	-	-
Ammonia (Aqueous up to 30% NH3)	Colorless Liquid	1	1	1	1	1	1	1	1	1	2	1	1	1	1	-	1	1	-	X	1
Ammonia Liquor	Colorless Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammoniated Fatty Acid (ie Ammonium Caprylate)	Liquid above 167°F (75°C)	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ammonium Acetate	In Water	1	1	1	1	1	1	1	2	1	1	-	1	2	1	-	1	1	-	X	1
Ammonium Bicarbonate	White Crystals	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1
Ammonium Bisulfate (50%)	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Ammonium Carbonate	Colorless to White Powder	1	1	-	-	X	-	1	2	-	-	-	-	-	1	1	1	1	-	-	1
Ammonium Chloride	White Crystals	1	-	X	-	-	-	1	-	-	-	-	-	-	-	-	2	2	-	X	1
Ammonium Chloride Solution	Liquid	1	1	-	1	2	1	1	X	1	-	1	1	X	1	-	2	2	-	X	1
Ammonium Flouride	White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Hydroxide (16%, 20%, 26%, & 30%)	Colorless Liquid	1	1	1	-	-	-	-	-	-	2	-	-	-	-	2	1	1	-	X	1
Ammonium Hydroxide (up to 30% NH3)	Colorless Liquid	1	1	1	1	2	X	2	2	2	2	1	1	X	X	2	1	1	-	X	1
Ammonium Metaphosphate	White powder	1	1	-	1	2	2	2	2	1	-	2	-	-	2	1	1	1	X	-	1
Ammonium Nitrate	Colorless Crystals	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1
Ammonium Nitrate Fertilizer (20.5% N,or 33.5% N)	Aggregate	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1
Ammonium Nitrate Prills and Oil	Aggregate	1	-	-	-	1	-	1	-	-	-	-	-	-	-	1	1	1	2	X	1
Ammonium Nitrate Solution (up to 83%)	Liquid	1	1	1	1	1	-	1	1	-	1	1	1	1	-	1	1	1	2	X	1
Ammonium Nitrite	Colorless crystal	1	1	-	-	X	X	X	2	-	-	-	1	-	-	-	1	1	-	-	1
Ammonium Persulfate	Solution in Water	1	1	-	-	X	-	-	X	-	X	-	-	-	-	-	1	1	-	X	X
Ammonium Phosphate	White Crystals or Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	-	1
Ammonium Phosphate Solutions	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	-	1	X	2	1	X	-	1
Ammonium Polysulfide Solution	Yellow Solution	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Sulfate	Gray to White Crystals	1	1	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	X	X	1
Ammonium Sulfide	Yellow Crystals	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	X	1
Ammonium Sulfide Solution (40-44% or less)	Liquid	1	1	-	1	2	1	1	-	1	1	1	1	-	1	1	1	1	X	X	1
Ammonium Thiocyanate (50-60% or less)	In Water	1	1	1	1	1	1	1	1	-	1	1	1	-	-	1	1	1	-	-	1
Amyl Acetate (Banana or Pearl Oil)	Colorless Liquid	1	1	1	2	X	X	X	X	2	X	X	X	1	X	X	1	1	X	1	X
Amyl Alcohol	Colorless Liquid	1	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	-

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CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS					
		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Amyl Chloride (Chloropentane)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	1	1	-	-	X
Amyl Chlorides (mixed)	Straw to Purple Liquid	1	2	2	X	X	X	X	X	X	1	X	2	1	X	-	1	1	-	-	X
Amyl Chloronaphthalene	-	1	1	2	X	X	X	X	X	X	1	X	X	1	-	-	1	1	-	-	-
Amyl Naphthalene	-	1	1	-	X	X	X	X	X	X	1	X	X	-	-	-	1	1	-	-	-
Amyl Phenol	Clear Straw Colored Liquid	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Amylamine	Colorless Liquid	1	X	-	X	2	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Amylbenzene (sec amylbenzene)	Clear Liquid	1	2	2	X	2	X	X	2	X	1	-	-	-	-	-	-	-	-	-	-
Anethole (anise camphor)	White Crystals/Liquid > 73°F(23°C)	1	2	-	-	X	X	X	X	X	1	X	X	X	-	2	1	1	2	X	1
Anhydrous Ammonia (R 717)	Gas or Liquid	NO HOSE AVAILABLE														-	-	-	-	-	-
Aniline	Colorless Oily Liquid	1	2	X	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1
Aniline Dyes	-	1	1	-	2	X	X	X	X	2	2	X	2	-	-	X	1	1	-	-	2
Aniline Hydrochloride	White Crystals	1	1	-	2	2	2	2	X	2	-	-	-	-	-	-	X	X	-	X	2
Aniline Oil (Aniline)	Colorless Oily Liquid	1	2	X	2	X	X	X	X	2	1	X	2	X	-	2	1	1	2	X	1
Animal Fat (Lard)	White Solid/Liquid > 108°F(42°C)	1	1	1	X	1	X	X	2	X	1	X	1	1	-	-	1	1	1	X	-
Animal Gelatin	-	1	-	1	-	1	-	-	1	-	-	-	-	-	1	-	1	1	-	-	-
Animal Grease, Inedible, Liquid	Liquid	1	-	-	X	1	-	X	2	X	1	2	-	-	-	-	-	-	-	-	-
Animal Oils	Solid to Liquid	1	-	-	-	1	-	-	2	-	-	-	1	1	1	1	1	1	1	-	-
Ant Oil (Furfural)	Colorless to Reddish Brown Liquid	1	1	-	X	X	X	X	2	X	2	2	1	-	X	2	1	1	1	1	2
Antifreeze (Glycol Base)	Liquid	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Antimony Chloride (50%)	White Powder	1	1	1	-	-	-	-	-	2	1	-	-	1	1	X	X	X	-	-	1
Antimony Pentachloride	Reddish-yellow Liquid	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Antimony Salts	White Crystal	1	1	-	1	2	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-
Aqua Ammonia (Ammonium Hydroxide) (30%)	Colorless Liquid	1	1	1	1	2	2	2	2	2	2	1	1	X	X	2	1	1	-	X	1
Aqua Regia (Nitrohydrochloric Acid)	Fuming Yellow Liquid	1	2	X	X	X	X	X	X	X	1	X	2	X	X	-	X	X	-	-	X
Argon, Compressed	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-
Aromatic Hydrocarbons	Typically Colorless Liquids	1	2	2	X	2	X	X	X	X	1	X	X	1	X	1	1	1	2	2	-
Arsenic Acid	In Water	1	1	1	2	-	X	X	-	2	1	-	1	-	-	2	-	1	2	-	2
Arsenic Trioxide	In Acid	1	1	1	X	2	X	X	2	X	1	X	-	-	1	-	-	-	-	-	-
Askarel (Transformer Oil)	Varies	1	2	2	X	X	X	X	X	X	1	X	1	1	X	1	1	1	-	1	2
Asphalt	Varies	1	2	X	X	2	X	X	-	X	1	-	-	X	X	1	1	1	-	1	-
Asphalt (Blown)	Black Solid	-	-	X	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Asphalt (Cut Back)	Black Liquid	1	X	X	X	2	X	X	2	X	1	X	X	2	X	1	1	1	-	1	-
Asphalt Emulsion	Black Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asphalt Paint	Black Liquid	1	2	X	X	2	X	X	-	X	1	X	-	2	X	-	-	-	-	-	-
Asphaltene	In Carbon Disulfide	1	2	X	X	2	X	X	2	X	1	X	X	1	-	-	-	-	-	-	-
ASTM Oil No. 1	Brown Liquid	1	1	1	X	1	X	X	1	X	1	2	1	1	2	1	1	1	1	1	2
ASTM Oil No. 2	Brown Liquid	1	1	1	X	1	X	X	2	X	1	2	1	1	X	1	1	1	1	1	X
ASTM Oil No. 3	Brown Liquid	1	1	1	X	1	X	X	X	X	1	X	1	1	X	1	1	1	1	1	X
ASTM Reference Fuel A	Liquid	1	1	1	X	1	X	X	1	X	1	1	1	1	2	1	1	1	1	1	X
ASTM Reference Fuel B	Liquid	1	2	1	X	1	X	X	2	X	1	X	2	1	X	1	1	1	1	1	X
ASTM Reference Fuel C	Liquid	1	2	2	X	2	X	X	X	X	1	X	2	1	X	1	1	1	-	1	X
ATF (Automatic Transmission Oil)	Liquid	1	1	1	X	1	-	-	-	X	1	-	1	-	-	-	-	-	-	-	-
B																					
Baltic Types 100, 150, 200, 300, 500	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	2
Banvel (Ag Spray, Concentrated)	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
Bardol B	Dark colored Liquid	1	1	-	X	X	X	X	X	X	2	X	-	-	-	1	1	1	-	-	-
Barite (Natural Barium Sulfate)	White to Yellowish Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	2	1
Barium Carbonate	White Powder	1	1	-	X	1	X	1	1	X	1	X	X	-	1	2	1	1	-	1	1
Barium Chloride	Colorless Crystals	1	1	1	1	1	1	1	1	1	1	1	1	X	1	X	1	1	-	2	1
Barium Hydroxide	White Powder	1	1	1	1	1	X	1	1	1	-	1	1	-	X	2	1	1	-	-	1
Barium Sulfate	White to Yellowish Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	2	1
Barium Sulfide	Yellowish Green to Gray Powder	1	1	1	-	-	-	1	-	-	1	-	-	-	-	X	1	1	-	X	1

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Basic Copper Arsenate	Blue to Green Powder	1	1	-	-	-	2	1	-	-	1	2	-	-	1	1	1	1	-	-	-
BBP (Butyl Benzyl Phthalate)	Clear Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Beer	Yellow Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beet Sugar Liquors	Colorless Solution	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	-	X
Bellows 80-20 Hydraulic Oil	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	X
Benzaldehyde (Benzoic Aldehyde)	Colorless to Yellow Liquid	1	1	1	2	X	X	X	X	2	X	X	2	2	X	1	-	-	1	-	1
Benzene (Benzol)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	X
Benzenesulfonic Acid	Liquid above 151°F (66°C)	1	1	1	-	-	X	X	X	2	1	2	-	-	X	X	-	2	X	-	1
Benzidine	Paste	1	2	-	X	2	X	1	X	X	-	-	-	-	X	1	1	1	1	1	X
Benzoic Acid	White Crystals	1	1	1	2	X	X	X	X	2	1	2	1	-	X	-	-	-	-	-	-
Benzoic Aldehyde (Benzaldehyde)	Colorless to Yellow Liquid	1	1	1	2	X	X	X	X	2	X	X	2	2	X	1	-	-	1	-	1
Benzol (Benzene)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	X
Benzophenone	White Powder	1	1	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Benzotrichloride	Colorless to Yellow Liquid	1	-	-	X	X	X	X	X	X	1	-	X	2	X	-	-	-	-	-	-
Benzyl Acetate	Water White Liquid	1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl Alcohol	Water White Liquid	1	1	1	2	X	X	X	X	1	1	X	1	X	1	-	-	-	-	-	-
Benzyl Alcohol, Photo Inhibited	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	1
Benzyl Benzoate	Water White Liquid	1	1	-	2	-	-	-	-	2	1	-	-	-	-	1	1	1	-	-	-
Benzyl Chloride	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	-	X	2	X	1	-	-	-	-	-
Bicarbonate Of Soda	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth Carbonate	White Powder	1	-	-	-	-	-	1	X	-	-	-	-	-	-	1	1	1	-	-	1
Bisphenol A	White Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bitumastic	Liquid	1	-	X	X	2	X	X	2	X	2	X	2	-	-	1	1	1	-	1	-
Black Liquor (RXN Product Pulpwood+NaOH)	Black Alkaline Liquid	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Black Sulfate Liquor (See "Black Liquor")	Black Alkaline Liquid	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Blast Furnace Gas (Cooled)	Gas	1	1	-	-	X	X	X	X	X	1	X	-	-	X	1	1	1	-	1	-
Bleach (Chlorinated Lime)	White Powder (35-37% Cl)	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bleach Liquor (Calcium Hypochlorite/H2O)	Clear Solution	1	1	1	2	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Borax (Sodium Borate)	White Crystals	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
Bordeaux Mixture (Slaked Lime &Copper Sulfate)	In Water	1	1	1	1	1	2	2	2	1	1	-	-	-	1	-	1	1	-	-	-
Boric Acid	White Powder or Colorless Scale	1	1	1	1	1	1	1	1	1	1	1	1	X	1	X	2	1	1	X	1
Boric Oxide	Colorless Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-
Brake Fluid (Petroleum Base)	Liquid	1	1	-	X	1	X	X	2	X	1	X	1	1	2	1	1	1	-	1	X
Brake Fluid (Synthetic Base)	Liquid	1	1	-	1	X	X	X	X	1	X	X	1	-	2	1	1	1	-	1	-
Brine (Salt)	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
Bromine	Dark Reddish Brown Liquid	1	-	-	X	X	-	-	X	-	1	-	-	X	X	1	1	1	1	1	-
Bromobenzene	Colorless Liquid	1	-	-	X	-	X	X	-	X	1	-	-	-	X	-	-	-	-	-	-
Bromochloroethane	Colorless Liquid	-	-	X	X	-	X	X	-	X	X	-	X	X	-	-	-	-	-	-	-
Bromochloromethane (Chlorobromomethane)	Clear Liquid	1	2	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	-	1	X
Bromotoluene	Clear Liquid	1	-	-	X	-	X	X	-	X	1	-	X	-	X	-	-	-	-	-	-
Bubble Bath Compounds	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bunker Oil	Liquid	1	2	2	X	1	X	X	2	X	1	X	-	1	X	1	1	1	1	1	-
Butadiene (1,3)	Gas	1	1	-	X	2	X	X	X	X	1	X	-	1	X	-	1	1	-	1	1
Butanal (Butyraldehyde)	Water White Liquid	1	2	-	X	X	X	X	X	X	X	X	2	-	-	-	-	-	-	1	-
Butandiol (Butylene Glycol)	Colorless Oily Liquid	1	1	2	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-
Butane (Gas)	Colorless Gas	USE LPG HOSE ONLY														-	-	-	-	-	-
Butane (Liquid)	Liquid	USE LPG HOSE ONLY														-	-	-	-	-	-
Butanol (Butyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1
Butter	Yellow to white semi-Solid to Liquid	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Butter Oil (Use FDA Hose)	Yellow to white Liquid	1	-	-	-	-	X	X	2	-	-	-	-	-	-	1	1	1	1	1	-
Butyric Acid	Colorless Liquid	1	1	1	2	-	2	2	X	2	1	X	1	X	-	-	-	-	-	-	-
Butyl Carbitol (Diethylene Glycol Butyl Ether)	Colorless Liquid	1	1	-	2	2	X	X	2	2	1	-	1	-	-	1	1	1	1	1	-

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Butyl Cellosolve (EG Monobutyl Ether)	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Butyl "OxitolTM" for EG Monobutyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Butyl Acetate	Colorless Liquid	1	2	2	X	X	X	X	X	2	X	X	2	1	1	2	1	1	1	1	X
Butyl Acrylate	Colorless Liquid	1	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Butyl Alcohol (Butanol)	Colorless Liquid	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1
Butyl Aldehyde	Water White Liquid	1	-	-	2	X	-	-	X	-	X	X	-	-	-	-	-	-	-	-	-
Butyl Benzyl Phthalate (BBP)	Clear Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Butyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Butyl Ether	Colorless Liquid	1	1	-	-	2	X	X	2	2	X	-	1	-	-	1	1	1	1	1	-
Butyl Ethyl Ether (Ethyl-n-Butyl Ether)	Liquid	1	-	-	-	2	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-
Butyl Formate	Colorless Liquid	1	-	-	-	X	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Mercaptan (2-Methyl-2-Butanathiol)	Liquid	1	1	-	X	-	X	X	-	X	1	-	-	-	X	-	1	1	-	-	-
Butyl Methacrylate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Stearate	Colorless Liquid	1	1	-	X	2	X	X	X	X	1	-	2	-	1	1	1	1	1	1	-
Butylamine	Colorless Liquid	1	1	-	-	X	X	X	X	X	X	X	2	-	-	1	1	1	1	1	X
Butylene Glycol (Butandiol)	Colorless Oily Liquid	1	1	2	-	-	-	-	-	-	1	-	-	X	-	-	-	-	-	-	-
Butyraldehyde (Butanal)	Water White Liquid	1	2	-	X	X	X	X	X	X	X	X	2	-	-	-	-	-	-	1	-
Butyric Acid	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	X	1	1	1	X	1	1	1	2	-
Butyric Anhydride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C																					
Cadmium Acetate (Soluble in H2O & Alcohols)	In Water or Alcohol	1	-	-	-	X	-	X	-	1	X	-	-	-	-	-	-	-	-	-	-
Cake Alum (Aluminum Sulfate)	White Crystals	1	1	-	1	1	-	1	1	-	-	-	-	-	-	X	X	2	X	X	1
Cake Alum Solution (Al Sulphate up to 50%)	In Water	1	1	1	1	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-	-
Calcine Liquor (Radioactive Waste)	In Water Solution	1	1	-	1	1	-	-	-	1	1	-	-	-	-	1	1	1	2	-	-
Calcium Acetate	Powder	1	1	-	1	X	2	2	X	1	X	X	1	-	-	1	1	1	1	1	-
Calcium Aluminate (Soluble in Acids)	In Acid	1	-	-	-	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Calcium Aluminate (Tricalcium Aluminate)	Crystals or Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium Arsenate	In Dilute Acid	1	1	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Calcium Bisulfide (Calcium Hydrosulfide)	In Alcohol or Water	1	1	-	-	1	2	2	1	1	1	1	1	-	2	-	2	1	-	X	1
Calcium Bisulfite (Calcium Hydrogen Sulfite)	Yellow Liquid	1	1	-	-	1	2	2	1	1	1	1	1	-	1	-	1	1	-	-	1
Calcium Bromide Solution	In Water or Alcohol	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Calcium Carbonate	Solid White Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calcium Carbonate Slurry	Solid in H2O	1	-	-	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Calcium Chlorate	In Water or Alcohol	1	1	-	2	1	2	2	1	2	-	1	-	-	1	-	2	1	-	-	1
Calcium Chloride, Dry	White solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	1	-	2	1
Calcium Chloride, Liquid (Not For Food)	In Water or Alcohol	1	1	-	1	1	1	1	1	1	1	1	1	X	1	-	-	-	-	-	-
Calcium Chloride, Liquid, Food Grade 33%	In Water	1	-	-	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-
Calcium Hydrogen Sulfite (Calcium Bisulfite)	Yellow Liquid	1	1	-	-	1	2	2	1	1	1	1	1	-	1	-	1	1	-	-	1
Calcium Hydrosulfide (Calcium Bisulfide)	In Alcohol or Water	1	1	-	-	1	2	2	1	1	1	1	1	-	2	-	2	1	-	X	1
Calcium Hydroxide (Hydrated or Slaked Lime)	Solid White Powder	1	1	-	-	2	1	1	1	1	X	1	1	-	X	X	X	1	-	2	1
Calcium Hydroxide Solutions	In Glycerol or Acids	1	1	X	-	2	-	-	-	-	-	-	-	X	-	2	1	1	X	X	-
Calcium Hypochlorite	Solid White Crystals	1	2	X	-	-	X	X	X	2	-	2	1	X	2	-	-	-	-	-	-
Calcium Hypochlorite Solutions	In Water or Alcohol	1	1	X	-	-	X	X	X	2	-	2	1	-	1	-	X	2	X	X	1
Calcium Metasilicate (Calcium Silicate)	White Powder	1	1	-	-	2	2	1	-	2	1	2	1	-	1	1	1	1	1	1	-
Calcium Nitrate Solutions	In Water, Alcohol, or Acetone	1	1	-	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1
Calcium Oxide (Lime; quick,unslaked)	White to Gray Lumps	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Calcium Silicate (Calcium Metasilicate)	White Powder	1	1	-	-	2	2	1	-	2	1	2	1	-	1	1	1	1	1	1	-
Calcium Stearate	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium Sulfate	White Powder or Crystals	1	1	-	1	1	-	1	1	1	1	1	1	-	-	1	1	1	-	1	1
Calcium Sulfide	Yellow to Gray Powder	1	1	-	-	1	2	1	2	1	2	1	1	-	2	1	1	1	2	-	-
Calcium Sulfite (Soluble In Sulfurous Acid)	In Acid	1	1	1	1	-	-	-	-	X	1	-	1	-	-	-	-	-	-	-	-
Caliche Liquors (Sodium Nitrate)	In Water	1	1	-	-	1	2	2	-	1	-	1	-	-	-	-	1	1	-	-	-

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CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS					
		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Camphene (Liquid above 115°F (46°C)	Liquid above 115°F (46°C)	1	-	-	X	-	-	-	-	-	1	X	-	-	-	-	-	-	-	-	-
Cane Sugar Liquors	In Water	1	1	-	2	1	2	2	1	2	-	1	1	-	1	1	1	1	1	2	1
Caproic Acid	Colorless or Yellow Liquid	1	1	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Caprolactam	White Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprolactam, Molten (above 156°F (69°C)	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
Caprylic Acid (Octanoic Acid)	Colorless, Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Carbamates	Crystals	1	1	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Carbolic Acid	Liquid above 109°F (43°C)	1	2	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	-
Carbolic Acid (Phenol)	White or Pink Crystals	1	2	-	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	-
Carbolic Acid (Phenol, 82-95% in Creosols)	Liquid	1	2	-	2	X	X	X	X	2	2	X	1	X	X	X	1	1	2	X	-
Carbon Dioxide (Dry)	Gas	1	1	-	1	1	1	1	1	1	1	1	-	-	1	1	1	1	1	1	1
Carbon Dioxide (Wet)	Gas with Water Vapor	1	1	1	2	1	2	2	1	2	1	1	-	-	1	1	1	1	1	1	1
Carbon Disulfide	Clear to Faint Yellow Liquid	1	2	1	X	2	X	X	X	X	1	X	2	1	X	2	1	1	2	2	X
Carbon Monoxide	Gas	1	2	1	1	2	X	X	2	X	1	1	-	-	1	1	1	1	1	1	1
Carbon Tetrachloride (Pyrene)	Colorless Liquid	1	2	X	X	X	X	X	X	X	1	X	2	1	X	X	2	2	X	2	X
Carbonic Acid	Liquid	1	1	1	1	1	1	1	1	1	1	1	1	-	X	X	1	1	2	X	1
Carbonyl Chloride (Phosgene)	Gas/ Liquid	1	X	X	X	X	X	X	X	1	1	X	-	2	-	-	-	-	-	-	-
Casein (White amorphous solid)	In Concentrated Acid	1	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Castor Oil	Pale Yellow or Colorless Liquid	1	1	-	-	1	X	X	1	2	1	1	1	-	1	1	1	1	1	1	1
Caustic Potash, Dry (Potassium Hydroxide)	White pellets or flakes	1	1	-	2	X	2	1	2	1	1	1	1	X	X	-	-	-	-	-	-
Caustic Potash, Liquid (up to 45%)	Solution in Water	1	1	1	2	2	2	2	-	1	2	-	1	1	1	-	-	-	-	-	-
Caustic Soda, Dry (Sodium Hydroxide)	White beads or pellets	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Caustic Soda, Liquid (up to 73%)	Solution in Water	1	2	-	2	X	1	1	2	2	X	1	1	2	X	-	-	-	-	-	-
Cellosolve Acetate (Eg Ethyl Ether Acetate)	Colorless Liquid	1	1	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	-	1
Cellosolve Butyl (Eg Butyl Ether)	Colorless Liquid	1	1	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	-	1
Cellulose	Solid, many forms	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-
Cement, Portland	Gray Powder	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
China-Wood Oil (Tung Oil)	Yellow Oil	1	2	-	X	2	X	X	X	X	1	2	-	-	2	1	1	1	1	1	-
Chlordane	Colorless Viscous Liquid	1	1	-	X	X	-	-	X	-	1	X	-	1	2	-	-	-	-	-	-
Chlorinated Napthalene (Chloronapthalene)	Oily Liquid to Solid	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Chlorinated Solvents (ie Tetrchloroethane)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-	-
Chlorine	Gas	NO HOSE AVAILABLE														-	-	-	-	-	-
Chlorine Liquid (Liquid @ 210 PSIG @ 120°F (38°C)	Clear Amber Liquid	1	-	-	X	-	-	-	-	-	1	-	-	X	X	-	-	-	-	-	-
Chlorine Trifluoride	Pale Green Liquid	1	-	-	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Chlorine Water (3% Chlorine)	Clear, yellowish Liquid	1	1	1	X	-	-	-	-	-	1	-	-	-	-	-	X	X	-	-	1
Chloroacetic Acid (Monochloroacetic Acid)	Powder or White Crystals	1	1	X	X	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
Chloroacetic Acid Under 100°F (38°C)	Solid	1	1	1	X	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
Chloroacetic Acid Solution	In Water, Alcohol, Ether	1	1	X	2	-	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1
Chloroacetone	Colorless Liquid	-	-	-	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Chloroacetyl Chloride	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Chloroaniline	Amber Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene (Phenyl Chloride) (Monochlorobenzene)	Clear Liquid	1	2	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	1	1	X
Chlorobromomethane (Bromochloromethane)	Clear Liquid	1	2	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	-	1	X
Chlorodifluoromethane (Freon 22)	Gas	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Chloroethane (Ethylene Dichloride)	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Chloroform	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	X	X	2	X	1	1	1	1	1	X
Chloronapthalene (Chlorinated Napthalene)	Oily Liquid to Solid	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Chloropentane (n-amyl chloride)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	1	1	-	-	X
Chlorophenol	In Benzene, Alcohol, Ether	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloropicrin Mixture	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Chloropropylene Oxide (Epichlorohydrin)	Volatile Liquid	1	2	-	X	-	-	-	-	-	X	-	-	-	-	1	-	-	-	-	1
Chlorosulfonic Acid	Colorless to Light Yellow Liquid	NO HOSE AVAILABLE														-	-	-	-	-	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Chlorothene (TM for chlorinated solvents)	Colorless Liquid	1	1	X	-	X	-	-	X	-	2	-	-	-	-	-	1	1	-	1	-
Chlorotoluene	Colorless Liquid	1	-	-	X	X	X	X	X	X	1	X	X	-	X	1	1	1	1	1	-
Chlorox	Colorless Liquid	1	2	1	-	-	2	2	2	2	-	2	1	1	1	-	2	1	-	-	X
Chocolate Syrup	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Chrome Alum (Chromium Potassium Sulfate)	In Water	1	1	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	1
Chromic Acid (100%)	Dark Red Crystals	1	X	2	-	-	-	-	-	-	1	-	-	-	X	X	X	X	X	X	-
Chromic Acid (25% Solution or less)	In Water	1	1	1	2	X	X	X	X	X	1	2	1	X	X	X	X	2	X	X	1
Chromic Acid (50% Solution with water)	In Water	1	1	1	2	X	X	X	X	X	1	2	1	X	X	X	X	2	X	X	1
Chromic Acid (Chromium Trioxide)	Purplish-Red Crystals	1	X	2	-	-	-	-	-	-	1	-	-	-	X	X	X	2	X	X	1
Chromic Chloride	In Water	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Chromium Trioxide (Chromic Acid)	Purplish-Red Crystals	1	X	2	-	-	-	-	-	-	1	-	-	-	X	X	X	2	X	X	1
Cider	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Cinene (Dipentene)	Colorless Liquid	1	2	-	X	X	X	X	-	-	1	-	-	-	-	-	-	-	-	-	-
Citgo FR Fuels	Liquid	1	1	-	1	X	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-
Citric Acid Solution	In Water	1	1	1	2	X	2	2	1	2	1	1	-	X	1	X	X	1	1	X	2
Coal Gas (Coke Oven Gas, Max 120°F (49°C)	Gas	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Coal Tar	Black, viscous Liquid	1	-	-	X	2	X	X	2	X	1	X	2	X	X	1	1	1	1	1	-
Coal Tar Pitch (Roofing)	Liquid above 212°F (100°C)	1	-	-	X	2	X	X	2	X	1	2	2	-	X	-	-	-	-	-	-
Cobalt Nickel Plating Solution	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	X	-	-	-	2	-	-	-
Cocoa Butter (Theobroma Oil)	Liquid above 95°F (35°C)	1	1	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-
Coconut Oil	Liquid above 77°F (25°C)	1	-	-	2	1	X	X	1	2	1	2	-	1	2	-	-	-	-	-	-
Cod Liver Oil	Pale Yellow Liquid	1	1	-	2	X	X	X	X	2	1	X	-	-	-	1	1	1	1	1	-
Coke Oven Gas (300°F (149°C) or less)	Gas	1	1	-	X	X	X	X	X	X	1	2	-	-	-	1	1	1	2	-	1
Copper Arsenate (Cupric Arsenate)	In Dilute Acid	1	1	-	-	-	2	2	-	-	1	2	-	-	-	1	1	1	-	-	-
Copper Chloride (Cupric Chloride)	In Water	1	1	-	-	2	2	2	2	2	1	2	2	X	1	X	X	1	-	X	1
Copper Cyanide (Cupric Cyanide)	In Dilute Acids or Alkalies	1	1	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Copper Nitrate (Cupric Nitrate)	In Water	1	1	-	1	1	2	2	1	1	1	1	1	-	1	X	1	1	-	X	1
Copper Sulfate (Cupric Sulfate)	In Water	1	1	-	2	1	2	2	1	2	1	1	1	X	1	X	1	1	X	X	1
Copper Sulfide (Soluble in Nitric Acid)	In Nitric Acid	1	-	-	-	1	-	X	-	1	1	1	-	-	-	-	-	-	-	-	-
Corn Oil	Pale Yellow Liquid	1	1	-	2	2	X	X	2	2	1	X	2	-	1	1	1	1	1	1	X
Corn Syrup (Glucose Syrup)	Clear Liquid	1	2	-	2	2	2	2	2	2	2	2	-	-	-	1	1	1	1	-	-
Cottonseed Oil	Liquid, several colors	1	1	-	2	2	-	-	1	-	1	2	2	-	-	1	1	1	1	1	1
Creosote (high Napthalene/Anthracene)	Liquid	X	2	X	-	2	X	X	X	2	1	X	-	-	X	2	1	1	1	X	2
Cresol (Methyl Phenol)	Liquid above 95°F (35°C)	1	2	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	-	2
Cresylic Acid	Liquid	1	-	-	X	X	X	X	X	X	1	X	-	X	-	-	-	-	-	-	-
Crotonic Acid (Methylacrylic Acid)	White Crystalline Solid	1	1	1	2	2	X	X	-	1	1	-	1	X	-	1	X	-	-	-	-
Crude Oil (Crude Petroleum Oil)	Liquid	1	1	-	X	1	X	X	2	X	1	2	2	-	1	1	1	1	1	1	1
Crude Wax	Liquid above 200°F (93°C)	1	2	-	-	2	-	-	-	2	1	-	-	-	1	1	1	1	-	1	1
Cryolite (Greeland Spar)	In Sulfuric Acid	1	2	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	X
Cumene (Isopropyl Benzene)	Colorless Liquid	1	2	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-
Cupric Arsenate (Copper Arsenate)	In Dilute Acid	1	1	-	-	-	2	2	-	-	1	2	-	-	-	1	1	1	-	-	1
Cupric Chloride (Copper Chloride)	In Water	1	1	-	-	2	2	2	2	2	1	2	2	X	1	X	X	1	-	X	1
Cupric Cyanide (Copper Cyanide)	In Dilute Acids or Alkalies	1	1	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Cupric Nitrate (Copper Nitrate)	In Water	1	1	-	1	1	2	2	1	1	1	1	1	-	1	X	1	1	-	X	1
Cupric Sulfate (Copper Sulfate)	In Water	1	1	-	2	1	2	2	1	2	1	1	1	X	1	X	1	1	X	X	1
Cutting Oil (Mineral Oil Base)	Liquid	1	2	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	X
Cutting Oil, Sulfur Base	Liquid	2	-	-	-	1	-	-	X	-	-	-	-	-	-	1	1	1	-	1	1
Cutting Oil, Water Soluble	Liquid	1	-	-	-	1	-	-	X	-	-	-	-	-	-	1	1	1	-	1	1
Cyanide, Copper (Cupric Cyanide)	In Dilute Acids or Alkalies	1	1	-	2	2	2	2	2	2	1	2	-	-	1	-	1	1	-	X	1
Cyanide, Mercuric	In Water	1	1	-	2	2	2	2	1	2	-	1	-	-	-	-	-	-	X	-	1
Cyanide, Potassium	In Water	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Cyanide, Silver	In Nitric Acid	1	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1

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Cyanide, Sodium	In Water	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	X	X	-
Cyclohexane	Colorless Liquid	1	2	1	X	2	X	X	X	X	1	X	1	-	X	1	1	1	-	1	X
Cyclohexanol	Colorless, oily Liquid	1	2	-	X	2	X	X	2	X	1	2	1	-	X	-	-	-	-	-	1
Cyclohexanone	Colorless to yellow Liquid	1	1	-	X	X	X	X	X	X	X	X	2	-	X	-	1	1	2	-	X
Cyclohexylamine	Colorless Liquid	-	-	-	1	-	X	-	-	1	X	-	-	-	-	-	-	-	-	-	-
Cyclopentane	Colorless Liquid	1	-	-	X	2	-	X	2	X	1	X	-	-	-	-	-	-	-	-	-
Cyclopentanol	Colorless Liquid	1	-	-	-	2	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
Cyclopentanone	Water white Liquid	-	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Cymene	Colorless Liquids	1	2	-	X	X	X	X	X	X	2	X	2	-	X	1	1	1	1	1	-
Cymene (Isopropyltoluene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	1	-	1	1	1	1	1	-
D																					
Decalin (TM for decahydronapthalene)	Colorless Liquid	1	2	2	X	2	X	X	-	X	1	X	2	1	-	-	-	-	-	1	1
Decanal (Decyl Aldehyde)	Colorless to yellow Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Decanol (Decyl Alcohol)	Colorless, water white Liquid	1	-	-	-	1	-	X	X	X	2	2	-	-	X	-	-	-	-	-	-
Decyl Aldehyde (n-decanal)	Colorless to yellow Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Deicing Fluid (ethylene or propylene glycol)	Orange Liquid	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	1	1	1	1
Denatured Alcohol	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
Detergent Sol. (Sodium dodcylbenzenesulfonate)	In Water	1	2	1	1	1	X	X	2	1	-	1	-	-	1	2	1	1	1	1	1
Developing Solutions (Hypos)	Liquid	1	1	-	-	-	2	2	2	2	-	2	-	-	1	-	1	1	-	-	-
Dextron	Brown Liquid	1	X	-	X	1	-	-	-	X	-	-	1	1	2	-	-	-	-	-	-
Dextrin (Starch gum)	Yellow or White Powder	1	1	-	1	1	-	-	1	X	1	-	-	1	1	-	1	1	-	-	1
Diacetone	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	1	1	X	1	1	1	-	1	1
Diacetone Alcohol	Colorless Liquid	1	1	-	-	X	2	2	-	2	X	2	1	-	X	1	1	1	1	1	1
Diammonium Phosphate	In Water	1	1	-	1	1	1	1	1	1	-	1	-	-	1	X	2	1	X	-	1
Diazinon	In Petroleum Solvents	1	-	-	1	-	1	1	-	-	1	-	-	-	2	-	-	-	-	-	2
Dibenzyl Ether	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	-	-	1	1	1	1	1	-
Dibutyl Ether	Colorless Liquid	1	1	-	-	X	X	X	X	2	X	X	1	-	-	1	1	1	1	1	-
Dibutyl Phthalate	Colorless Oily Liquid	1	1	-	1	X	X	X	X	2	2	X	2	-	1	1	1	1	1	1	2
Dibutylamine	Colorless Liquid	1	-	-	X	X	X	X	X	X	X	X	X	-	X	-	-	-	-	-	-
Dibutylsebacate	Clear Colorless Liquid	1	1	-	X	X	X	X	X	2	1	-	2	-	-	-	-	-	-	1	-
Dichloroacetic Acid	Colorless Liquid	1	-	-	-	X	-	2	-	X	X	X	-	-	-	-	-	-	-	-	-
Dichloroaniline	In Alcohol or Benzene	1	-	-	X	X	X	-	X	X	2	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene (ortho)	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	1	-
Dichlorobenzene (para)	White Crystals	1	2	-	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	1	-
Dichlorobenzyl Chloride	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	-	X	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	Gas, Liquid @ 140 PSIG @ 100°F	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Dichloroethane (Ethylene Dichloride)	Colorless Oily Liquid	1	2	2	X	X	X	X	X	X	2	X	X	X	X	-	-	-	-	-	-
Dichloroethyl Ether	Colorless Liquid	1	-	-	-	X	-	X	-	X	-	X	-	-	-	-	-	-	-	-	-
Dichloroethylene	Colorless Liquid	1	2	X	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	X
Dichloroethylene (Acetylene Dichloride)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	-	X	1	X	-	-	-	-	-	X
Dichloromethane (Methylene Chloride)	Colorless Liquid	1	1	2	X	X	X	X	X	X	2	X	X	X	X	1	1	1	-	1	-
Dichloropentane	Light Yellow Liquid	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Dichloropropane (Propylene Dichloride)	Colorless Liquid	1	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Dicyclohexylamine	Colorless Liquid	1	-	-	X	-	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-
DIDA (Diisodecyl Adipate)	Light Colored Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Diesel Fuel	Liquid	1	1	1	X	1	X	X	2	X	-	X	-	1	-	1	1	1	1	1	2
Diethanolamine (20%)	In Water or Alcohol	1	-	-	2	2	2	2	X	1	-	2	1	-	2	1	1	1	1	X	-
Diethanolamine	Liquid above 83°F (29°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	X	-
Diethyl Ether (Ethyl Ether)	Colorless Liquid	1	2	-	X	X	X	X	X	2	X	X	1	-	2	2	1	1	1	1	1
Diethyl Ketone	Colorless Liquid	1	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Diethyl Oxalate	Colorless Oily Liquid	1	-	-	X	X	-	X	X	X	-	X	-	-	X	-	-	-	-	-	-
Diethyl Phthalate (Ethyl Phthalate)	Water White Liquid	1	1	-	-	X	X	X	-	2	-	-	2	-	-	-	1	1	-	1	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Diethyl Sebacate	-	1	1	-	-	X	X	X	X	2	2	X	2	-	-	-	1	1	-	1	-
Diethyl Sulfate	Colorless Liquid	1	-	-	1	X	1	X	1	2	X	X	-	-	-	-	-	-	-	-	-
Diethyl Sulfide (Ethyl Sulfide)	Colorless Oily Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylacetaldehyde (Ethylbutyraldehyde)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylamine	Colorless Liquid	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1
Diethylbenzene	Colorless Liquid	1	1	-	X	-	X	X	-	X	1	-	2	-	-	-	-	-	-	-	-
Diethylene Dioxide (1,4 Dioxane)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Diethylene Ether (Dioxane)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Diethylene Glycol (Dihydroxydiethyl Ether)	Colorless Syrupy Liquid	1	1	-	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1
Diethylene Glycol Methyl Ether (Methyl Cellosolve)	Colorless Liquid	1	1	-	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Diethylene Glycol Monobutyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monobutyl Ether Acetate	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monoethyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diethylene Glycol Monomethyl Ether Acetate	Colorless Liquid	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylenetriamine	Yellow Liquid	1	1	1	1	-	X	-	X	1	X	X	-	-	-	-	-	-	-	-	-
Dihydroxyacetone	In Water	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dihydroxydiethyl ether (Diethylene glycol)	Colorless Syrupy Liquid	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1
Diisobutyl Ketone	Colorless Liquid	1	1	-	1	X	X	X	X	2	X	X	2	1	-	-	1	1	-	1	1
Diisobutyl Phenol (Octyl Phenol)	White Flakes	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisobutyl Phthalate	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisobutylene	Colorless Liquids	1	1	-	X	2	X	X	X	X	1	X	1	-	-	-	1	1	-	1	-
Diisodecyl Adipate (DIDA)	Light Colored Oily Liquid	1	-	-	-	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Diisooctyl Phthalate (DIOP)	Nearly Colorless Liquid	1	-	-	1	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Diisopropanolamine	Liquid above 108°F (42°C)	1	-	-	-	2	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-
Diisopropyl Ketone	Colorless Liquid	1	1	-	1	X	X	X	X	2	X	X	-	1	-	-	1	1	-	1	-
Diisopropylamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diisopropylbenzene (meta)	Colorless Liquid	1	2	2	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Diisopropylidene Acetone (Phorone)	Yellow Liquid	1	1	-	2	X	X	X	X	2	X	X	-	-	-	1	1	1	-	1	-
Dilauryl Ether	Liquid above 92°F (33°C)	1	1	-	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dimethyl Acetamide (DMAC)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl Aniline	Yellow/brown Oily Liquid	1	1	-	X	X	X	X	X	2	1	X	2	-	-	-	-	-	-	1	-
Dimethyl Ether	Liquid under Pressure	1	1	1	1	X	X	X	X	2	X	X	-	-	-	1	1	1	1	1	-
Dimethyl Formamide	Water White Liquid	1	1	-	2	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethyl Phthalate	Colorless Oily Liquid	1	1	-	2	X	X	X	X	2	1	X	1	-	-	-	-	-	-	1	-
Dimethyl Sulfate (Methyl Sulfate)	Colorless Liquid	1	1	-	X	X	X	X	X	2	X	X	-	1	1	-	-	-	-	-	-
Dimethyl Sulfide	Colorless Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethyl Sulfoxide	Colorless Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethyl Terephthalate	Colorless Crystals	-	-	-	-	X	X	-	X	X	1	-	-	-	-	-	-	-	-	-	-
Dimethylamine (DMA)	Liquid @ 70 PSIG @ 120°F (49°C)	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminoethanol (Dimethylethanolamine)	Colorless Liquid	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylaminomethyl Phenol (DMP)	Dark Red Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dimethylbenzene (DMB)	Colorless Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Dimethylcarbinol (isopropyl alcohol)	Colorless Liquid	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Dimethylcyclohexylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylformamide (DMF)	Water white Liquid	1	2	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
Dimethylketone (Acetone)	Colorless Liquid	1	1	X	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	2
Dimethylphenol (Xylenol)	White solid, liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrobenzene (Soluble in Chloroform)	In Chloroform	1	2	-	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, Solid	In Alcohol or Ether	1	1	1	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dioctyl Adipate di (2-ethylhexyl) adipate	Light Colored Oily Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

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Dioctyl Phosphite, di-(2-ethylhexyl) phosphite	Colorless Liquid	1	1	-	X	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Dioctyl Phthalate, di-(2-ethylhexyl) phthalate	Light Colored Liquid	1	1	-	X	X	X	X	X	X	1	X	2	-	-	1	1	1	1	1	X
Dioctyl Sebacate, di-(2-ethylhexyl) sebacate	Pale Straw Colored Liquid	1	1	-	-	X	X	X	X	2	1	X	X	-	-	-	-	-	-	-	-
Dioctylamine di-(2-ethylhexyl)amine	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIOP (Diisooctyl Phthalate)	Nearly Colorless Liquid	1	-	-	1	X	-	X	-	1	X	X	-	-	-	-	-	-	-	-	-
Dioxane (Diethylene Dioxide)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxane (Diethylene Ether)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	1
Dioxolane (Ethylene Glycol Formal)	Water White Liquid	1	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	1	1	-
Dipentene (Cinene, Limonene)	Colorless Liquid	1	2	-	X	X	X	X	-	-	1	-	-	1	-	1	1	1	1	1	-
Diphenyl Phthalate	Yellow White Powder	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dipropyl Ketone	Colorless Liquid	1	1	-	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Dipropylamine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dipropylene Glycol	Colorless Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dipropylene Glycol Monomethyl Ether (DPM)	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dirco Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Disodium Phosphate (DSP soluble in H2O)	Colorless or White Powder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disodium Phosphate Solution	In Water	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Distillate Fuel Oil	Clear to Brown Liquid	1	2	-	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Divinylbenzene (20-25% or 50-60% Grades)	Water White to Straw Liquid	1	2	-	X	X	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-
DMA (Dimethylamine)	Gas	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DMAC (Dimethyl Acetamide)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DMB (Dimethylbenzene)	Colorless Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
DMF (Dimethylformamide)	Water white Liquid	1	2	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	-	-	1
DMP (Dimethylaminomethyl phenol)	Dark Red Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dodecylbenzene (Detergent Alkylate)	Liquid	1	2	-	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dodecylphenol	Straw Colored Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Dolomite	Gray, Pink or White Powder	-	-	-	2	1	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-
Dowtherm A (Biphenyl and Biphenyl Ether Mix.)	Liquid	1	1	-	1	X	X	X	X	X	1	X	2	-	X	1	1	1	1	1	-
Dowtherm SR-1 (Ethylene Glycol)	Liquid	1	1	1	1	1	-	-	-	1	1	-	1	-	-	2	1	1	1	1	1
DPM (Dipropylene Glycol Monomethyl Ether)	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Duro Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
E																					
EDB (Ethylene Dibromide)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EDTA (Ethylenediaminetetraacetic Acid)	Colorless Crystals	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Emulsion (Oil in Water)	Water is Continuous Phase	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Enamels	Liquid	1	1	-	X	-	-	-	-	-	1	-	-	1	2	-	-	-	-	1	-
Epichlorohydrin (Chloropropylene Oxide)	Volatile Liquid	1	2	-	X	-	-	-	-	-	X	-	-	-	-	1	-	-	-	-	1
Epoxy Resin	Solid Pellet	-	-	-	1	-	-	-	1	2	X	-	-	-	-	-	-	-	-	-	-
Essential Oils	Liquid	1	2	-	X	1	X	X	2	-	1	-	-	-	2	1	1	1	1	1	-
Ethanol (Ethyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1
Ethanolamine (Aminoethanol)	Colorless Viscous Liquid	1	2	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-
Ethers	Liquids	1	1	X	1	2	X	X	X	2	X	2	1	-	2	1	1	1	1	1	2
Ethyl Acetate (Acetic Ether)	Colorless Liquid	1	1	X	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	2
Ethyl Acetoacetate	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	1	-	-	1	1	1	1	1	X
Ethyl Acrylate	Colorless Liquid	1	2	-	2	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X
Ethyl Acrylate, Inhibited	Colorless Liquid	1	2	-	2	X	X	X	X	X	X	X	2	-	X	1	1	1	-	-	X
Ethyl Alcohol (Ethanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1
Ethyl Aluminum Dichloride 90°F (32°C)	Clear Yellow Liquid	1	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
Ethyl Bromide	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	2	1	X	-	1	1	-	1	-
Ethyl Butyl Ether (Butyl Ethyl Ether)	Liquid	1	-	-	-	2	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-
Ethyl Butyrate	Colorless Liquid	1	1	-	-	X	X	X	X	2	-	-	-	-	-	-	1	1	1	-	-
Ethyl Chloride	Compressed Liquid	1	2	2	X	X	X	X	X	X	1	X	-	-	X	2	1	1	1	2	X

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Ethyl Chloroformate (Ethyl Chlorocarbonate)	Water White Liquid	1	-	-	X	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethyl Ether (Diethyl Ether)	Colorless Liquid	1	2	X	X	X	X	X	X	2	X	X	1	2	X	2	1	1	1	1	1
Ethyl Ether Acetate (Cellosolve Acetate)	Colorless Liquid	1	1	-	2	X	-	-	-	-	X	-	1	-	1	1	1	1	-	-	1
Ethyl Formate	Water White Liquid	1	-	-	2	X	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethyl Iodide	Colorless Liquid	1	-	-	X	X	-	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Ethyl Isobutyrate	Colorless Liquid	1	-	-	X	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-	-
Ethyl Mercaptan (Ethanethiol)	Colorless Pungent Liquid	1	1	-	X	X	X	X	X	X	1	X	-	-	X	2	-	-	-	-	-
Ethyl Methyl Ketone (MEK)	Colorless Liquid	1	1	1	2	X	-	-	X	-	X	X	2	1	X	-	-	-	-	-	-
Ethyl Oleate	Light Yellowish Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Oxalate	Colorless Liquid	1	1	-	2	X	2	2	X	2	1	-	1	-	-	-	-	-	-	-	-
Ethyl Pentachlorobenzene	-	1	1	-	X	X	X	X	X	X	1	X	-	-	-	2	1	1	-	1	-
Ethyl Phthalate (Diethyl phthalate)	Water White Liquid	1	1	-	-	X	X	X	-	2	-	-	2	-	-	-	1	1	-	1	-
Ethyl Propionate	Water White Liquid	1	-	-	X	X	-	X	X	X	-	-	-	-	-	-	-	-	-	-	-
Ethyl Propyl Ketone (3-Hexanone)	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Ethyl Silicate	Colorless Liquid	1	1	-	2	1	2	2	1	-	1	-	1	-	-	1	1	1	1	1	-
Ethyl Sulfide (Diethyl Sulfide)	Colorless Oily Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethylamine	Colorless Liquid or Gas	1	2	-	1	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	-
Ethylbenzene	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	2	-	-	1	1	1	-	1	-
Ethylbutanol (2-Ethylbutyl Alcohol)	Colorless Liquid	1	1	1	1	1	-	-	1	1	1	2	1	1	1	-	-	-	-	-	-
Ethylbutyl Alcohol (Ethylbutanol)	Colorless Liquid	1	1	1	1	1	-	-	1	1	1	2	1	1	1	-	-	-	-	-	-
Ethylbutyl Amine	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbutyl Ketone	Clear Liquid	1	1	-	1	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Ethylbutyraldehyde (Diethylacetaldehyde)	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylcellulose	Granular Solid	1	1	-	-	-	-	1	-	-	-	-	1	-	-	1	1	1	-	1	-
Ethylene Chlorohydrin	Colorless Liquid	1	1	-	X	X	-	-	X	2	1	-	-	X	X	-	-	-	-	-	-
Ethylene Cyanohydrin	Straw Colored Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Dibromide (EDB)	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Ethylene Dichloride (Chloroethane)	Colorless Liquid	1	2	2	X	X	X	X	X	X	2	X	X	X	X	-	-	-	-	-	-
Ethylene Glycol	Colorless Liquid	1	1	1	1	1	-	-	1	1	1	2	1	-	1	2	1	1	1	1	1
Ethylene Glycol Formal (Dioxolane)	Water White Liquid	1	-	-	-	-	-	-	-	-	X	-	-	-	-	1	1	1	1	1	-
Ethylene Glycol Monoethylether	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol Monoethylether Acetate	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol Monomethyl Ether	Colorless Liquid	1	1	-	2	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol N-Butyl Ether	Colorless Liquid	1	1	-	1	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylenediamine	Colorless Liquid	1	2	-	2	1	-	-	-	2	X	-	-	-	-	1	1	-	-	1	1
Ethylenediaminetetraacetic acid (EDTA)	Colorless Crystals	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ethylhexaldehyde	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylhexanediol	Colorless Liquid	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylhexanol (2-ethylhexyl alcohol)	Colorless Liquid	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	-
Ethylhexoic Acid	Liquid	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylhexyl Acetate	Water White Liquid	1	1	-	1	X	-	-	X	-	X	X	-	1	-	-	-	-	-	-	-
Ethylhexyl Acrylate	Liquid	1	2	-	-	X	-	-	-	-	X	-	-	-	X	-	-	-	-	-	-
Ethylhexyl Alcohol (Ethylhexanol)	Colorless Liquid	1	1	1	1	1	1	1	-	1	1	-	1	1	1	-	-	-	-	-	-
F																					
Fatty Acid	Solid, Semisolid or Liquid	1	2	2	2	2	X	X	2	2	2	X	2	-	2	2	1	1	1	2	1
Fatty Alcohol, Blend	C8-11 Liquids, >C11 Solids	1	1	1	1	1	1	1	1	1	1	-	1	1	1	-	-	-	-	-	-
Fatty Petroleum Alcohol	C11 or Less are Liquids	1	1	1	1	1	-	-	-	1	1	-	1	1	-	-	-	-	-	-	-
Ferric Bromide	Red Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferric Chloride	Black-Brown Solid	1	1	-	-	2	-	1	2	1	1	2	1	1	1	X	X	X	X	X	1
Ferric Chloride solution	Liquid	1	1	-	-	2	-	1	2	1	1	2	1	1	1	X	X	X	X	X	1
Ferric Nitrate	Violet Crystals	1	1	-	-	-	2	1	2	2	-	2	1	-	-	X	1	1	-	-	1
Ferric Nitrate Solution	Liquid	1	-	-	1	1	-	1	1	1	1	1	-	1	-	X	1	1	-	-	1

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Ferric Sulfate	Yellow Crystals or Gray Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	1	X	X	1
Ferric Sulfate Solution	Liquid	1	1	1	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	X	1
Ferrous Acetate Solution	Liquid in H2O or Alcohol	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ferrous Chloride	Greenish-White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	2	-	2	1
Ferrous Chloride, Solution	Liquid	1	1	-	-	-	-	-	-	1	1	2	1	-	1	X	1	2	-	2	1
Ferrous Nitrate	-	1	1	-	2	2	-	-	2	2	-	2	-	-	2	-	1	1	-	-	1
Ferrous Sulfate Solution	Liquid	1	1	1	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	X	1
Fertilizer (Liquid Manure)	Liquid	1	1	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	1	1
Finishing Oil	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire-Resistance Hydra-Fluid (Texaco)	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-
Firtec 290, MF	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fish Oil	Liquid	1	-	1	X	1	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-
Fixing Solution (Photo)	Liquid	1	1	-	-	-	2	2	2	2	-	2	-	1	1	-	1	1	-	-	1
Flint	Gray, Brownish, Black	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Floor Wax (Temperature Dependent)	Varies	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoboric Acid (48% Purity)	Colorless Liquid	1	1	1	2	-	2	2	2	-	-	2	1	-	X	-	1	1	-	-	1
Fluoboric Acid (up to 48%)	Colorless Liquid	1	1	-	1	-	2	2	2	-	1	2	1	-	X	-	1	1	-	-	1
Fluorine	Pale Yellow Gas	X	-	X	X	-	-	-	-	-	1	-	-	X	1	-	-	-	-	-	-
Fluorine (Liquid)	Yellow Liquid	NO HOSE AVAILABLE														-	-	-	-	-	-
Fluosilicic Acid (50%)	Colorless Liquid	1	1	1	2	X	-	-	2	X	-	2	1	X	X	-	-	-	1	-	1
Formaldehyde	Gas	-	1	-	1	-	-	-	-	-	1	-	-	1	-	X	2	1	2	1	-
Formaldehyde Solution (up to 50%)	Liquid	1	2	1	1	2	X	X	2	2	1	2	1	1	1	X	2	1	2	1	-
Formalin (37-50% HCHO with 15% MeOH)	Liquid	1	1	-	1	2	X	X	2	2	1	2	1	1	1	-	-	-	-	-	-
Formamide	Colorless Oily Liquid	1	1	-	-	-	X	X	-	-	-	-	-	X	-	-	-	-	-	-	-
Formic Acid	Colorless Liquid (bp 100°C)	1	1	1	2	-	X	X	1	2	X	2	1	X	X	X	2	1	-	2	1
FR Fluid D	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-
FR Hydraulic Fluid	Brown Liquid	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 12 (Dichlorodifluoromethane)	Gas or Liquid	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Freon 13	Gas or Liquid	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Freon 134a (HFC 134a)	Gas or Liquid	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Freon 22 (Chlorodifluoromethane)	Gas or Liquid	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Freon 23	Clear Liquid	SPECIAL HOSE REQUIRED														-	-	-	-	-	-
Fruit Juices	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Fuel Oil (ASTM 1-6)	Water White to Brown Liquids	1	2	1	X	1	X	X	2	X	1	X	1	1	X	2	2	2	1	1	-
Fumaric Acid	Colorless Crystals	1	1	1	2	-	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-
Fumaric Acid Solution (Allomalaic Acid)	Liquid	1	1	-	2	1	2	2	-	-	1	-	-	-	X	-	1	1	-	-	-
Furan (Furfuran)	Colorless to Brown Liquid	1	1	1	X	X	X	X	X	X	-	-	1	-	X	1	1	1	1	1	-
Furfural (Ant Oil)	Colorless to Reddish Brown Liquid	1	1	-	X	X	X	X	2	X	2	2	1	-	X	2	1	1	1	1	2
Furfural Alcohol	Colorless to Brown Liquid	1	1	2	X	X	X	X	2	X	1	2	1	1	X	2	1	1	1	1	2
Furfuran (Furan)	Colorless to Brown Liquid	1	1	1	X	X	X	X	X	X	-	-	1	-	X	1	1	1	1	1	-
Furfuryl Alcohol	Colorless to Reddish Brown Liquid	1	1	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
Fusel Oil (Amyl Alcohol, Grain Oil)	Colorless Liquid	1	1	1	2	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	-
Fyrguard 150, 200	-	1	1	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
Fyrquel 15R&O, 220R&O, 550R&O	-	1	1	-	1	X	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-
Fyrquel 90, 150, 220, 300, 550, 1000	-	1	1	-	1	X	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-
G																					
Gallic Acid (3,4,5 Trihydroxybenzoic Acid)	In Alcohol or Glycerol	1	1	1	1	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1
Gallic Acid Solution	In Alcohol Solution	1	1	-	-	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1
Gasohol (Gasoline blended with Ethanol)[1]	Colorless Liquid	1	2	1	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	X
Gasoline (Oxygenated - Blended With MTBE)[1]	Colorless Liquid	1	2	1	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	X
Gasoline (Unleaded Up to 50% Aromatics)[1]	Colorless Liquid	1	2	1	X	2	X	X	2	X	1	X	1	1	X	2	1	1	1	1	-
Gasoline (White)[1]	Colorless Liquid	1	2	-	X	2	X	X	2	X	1	X	-	1	X	2	1	1	1	1	-

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Gelatin	Flakes or Powder	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	-
Glacial Acetic Acid	Clear Colorless Liquid	1	1	1	2	-	-	-	X	X	X	-	X	X	X	-	-	-	-	-	-
Glacial Methacrylic Acid (GMAA)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glauber's Salt (Sodium Sulfate Decahydrate)	Crystals or Powder	1	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Gluconic Acid (Commercial 50% Aqueous)	Aqueous Solution	1	-	-	-	X	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-
Glucose	Crystals to White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-
Glucose Solution	Liquid	1	1	-	1	1	1	1	1	1	1	1	-	-	1	1	1	1	1	1	-
Glue	Varies	1	1	-	X	2	X	X	2	X	1	1	-	2	1	2	1	1	1	X	-
Glycerine (Glycerol)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	-
Glycerol (Glycerine)	Clear Viscous Liquid	1	1	-	1	1	1	1	1	1	1	1	1	-	1	2	1	1	1	1	-
Glycerol Monolaurate	Liquid above 80°F (27°C)	1	1	1	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Glycol FR Fluids	Liquid	1	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Glycol Slurry	Watery suspension	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycols (ie Ethylene Glycol)	Clear Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	-
GMAA (Glacial Methacrylic Acid)	White Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite	Powdered, Flake, Crystals	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Grease	Semi-Solid	1	1	2	X	1	X	X	2	X	1	2	-	-	1	1	1	1	1	1	-
Grease, Silicone Base	-	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	1	-
Green Liquor (Effluent Alkaline Pulping)	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Green Sulfate Liquor	Liquid	1	1	1	1	2	1	1	1	1	-	1	2	-	-	1	1	1	-	-	-
H																					
Halowax (Chlorinated Hydrocarbons)	Oils to Waxy Solid	1	1	1	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
HEA (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	X	-	-	-	-	-	1		1	-	-	-	-	-	-	-	-
HEA Acid (2-Hydroxyethyl Acrylate)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hematite (Iron Ore)	Black to Brick Red	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
HEP (2-Hydroxypropyl Acrylate	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Heptachlor (In Xylene)	Liquid	1	2	-	X	2	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Heptanal (Heptaldehyde)	Colorless Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptane	Colorless Liquid	1	2	1	X	1	X	X	2	X	1	X	1	1	2	1	1	1	1	1	-
Heptanedicarboxylic Acid (Azelaic Acid)	Yellowish to White Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptanoic Acid	Clear Oily Liquid	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Heptanol	Colorless Liquid	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-
Hexachlorocyclohexane	White to Yellowish Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	Yellow Liquid	1	-	-	X	-	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid (Palmitic Acid)	White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydrophthalic Anhydride	Clear Colorless Viscous Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexaldehyde	Colorless Liquid	1	1	1	1	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Hexamethylenediamine, Solution	Colorless Flat Solid Leaflets	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexamethyleneimine	Clear Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexane	Colorless Liquid	1	X	1	X	1	X	X	-	X	1	-	1	1	X	1	1	1	-	1	-
Hexanol (Hexyl Alcohol)	Colorless Liquid	1	1	-	X	1	-	-	2	-	1	X	1	-	-	1	1	1	1	2	-
Hexanone (Ethyl Propyl Ketone)	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Hexene	Colorless Liquid	1	-	-	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	-
Hexyl "Cellosolve" (EG monohexyl ether)	Water White Liquid	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Hexyl Alcohol (Hexanol)	Colorless Liquid	1	1	-	X	1	-	-	2	-	1	X	1	-	-	1	1	1	1	2	-
Hexyl Methacrylate	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexylamine	Water White Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Hexylene (1-Hexene)	Colorless Liquid	1	-	-	X	2	X	X	-	X	1	-	1	-	-	1	1	1	-	1	-
Hexylene Glycol	Colorless Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Honey	Yellow Liquid	1	-	-	1	1	-	1	1	-	1	-	-	-	1	-	-	-	-	-	-
Houghto-Safe 1055, 1110, 1115, 1120, 1130	Liquid	1	1	-	1	X	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
Houghto-Safe 271, 416, 520 & 616, 620	Liquid	1	1	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Houghto-Safe 5046	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	-	-	1	1	1	1	1	-
Houghto-Safe 625, 640 & 525 Under 100°F (38°C)	Liquid	1	1	-	1	1	-	-	-	1	-	-	-	-	-	1	1	1	1	1	-
HPA Acid (2-Hydroxypropyl Acrylate)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
HPO (Sodium Thiosulfate)	White Powder	1	1	-	-	1	1	1	1	1	-	1	1	1	1	X	1	1	2	X	-
Hy-Chock Oil	Liquid	1	1	-	-	1	-	-	-	-	1	-	-	1	-	1	1	1	-	-	-
Hydrocyanic Acid (up to 98%)	Water White Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	X	1	1	1	X	-
Hydrafluid 760 (Texaco and Houghton)	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	1	-
Hydrafluid AZR&O, A, B, AA, C	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	-	-
Hydrasol A (Textile Dying)	-	1	1	-	X	1	-	-	-	X	1	-	-	1	-	1	1	1	1	-	-
Hydraulic Fluid (Phosphate Ester Base)	Liquid	1	1	-	1	X	-	-	X	1	1	-	-	1	1	1	1	1	-	-	-
Hydraulic Fluid (Polyalphaolifin)	Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	1	1	1	-
Hydraulic Fluid (Std. Petroleum Oils)	Liquid	1	1	-	X	1	X	X	2	X	1	2	1	1	1	1	1	1	1	1	-
Hydraulic Fluid (Water Glycol Base)	Liquid	1	1	-	-	1	2	2	1	1	1	-	-	1	1	1	1	1	1	1	-
Hydraulic Fluid HF-18, HF-20	Liquid	1	1	-	1	1	-	-	-	1	1	-	-	1	2	1	1	1	1	1	-
Hydraulic Fluid HF-31	Liquid	1	1	-	X	-	-	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Hydrazine	Colorless Fuming Liquid	1	1	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Hydrazine Hydrate	Colorless Fuming Liquid	1	1	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Hydrazine Solution	Liquid	1	1	-	2	X	X	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Hydro-Drive Oil (Houghton)	Liquid	1	-	-	X	1	-	-	-	X	-	-	-	-	2	-	-	-	-	-	-
Hydrobromic Acid (62% and less)	Colorless to Yellow Liquid	1	1	1	X	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	-
Hydrobromic Acid (to 48%)	Colorless to Yellow Liquid	1	1	1	1	X	2	2	X	2	1	2	1	X	X	-	-	-	X	-	-
Hydrochloric Acid (15%)	Colorless to Yellow Liquid	1	1	1	2	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-
Hydrochloric Acid (37%)	Colorless to Yellow Liquid	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-
Hydrochloric Acid, anhydrous	Colorless Fuming Gas	1	-	-	-	-	-	-	-	-	1	-	-	-	-	X	X	X	X	X	-
Hydrocyanic Acid (10% Solution with water)	Water White Liquid	1	1	1	-	X	2	2	X	-	1	2	-	-	X	X	1	1	1	X	-
Hydrocyanic Acid (98% or less)	Water White Liquid below 77°F/25°C	1	-	-	-	-	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Hydrocyanic Acid (up to 20%)	Water White Liquid	1	1	-	1	2	2	2	2	-	1	1	-	-	2	-	-	-	-	-	-
Hydrofluoric Acid (38% or less)	Colorless Liquid	1	1	1	2	X	X	X	2	2	1	1	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (47% or less)	Colorless Liquid	1	1	1	2	X	X	X	2	2	1	2	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (53 % or less)	Colorless Liquid	1	1	X	-	X	X	X	2	X	1	2	1	X	X	X	X	X	X	X	-
Hydrofluoric Acid (70%)	Colorless Liquid	1	1	X	X	X	X	X	X	-	1	2	-	X	X	X	X	X	X	X	-
Hydrofluoric Acid (Concentrated)	Colorless Liquid	1	1	X	X	X	X	X	X	X	2	2	1	X	X	X	X	X	X	X	-
Hydrofluosilicic Acid	In Water	1	1	1	2	X	X	X	X	X	1	1	X	X	X	X	X	X	-	1	-
Hydrogen (Gas)	Gas	CONTACT DENVER PRODUCT APPLICATION														-	-	-	-	-	-
Hydrogen Bromide Liquified (Anhydrous)	Liquid	1	-	-	1	X	X	X	-	X	1	-	-	-	-	-	-	-	-	-	-
Hydrogen Bromide Solution (HydroBromic Acid)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrogen Bromide, Anhydride	Colorless Gas	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrogen Chloride	Colorless Fuming Gas	1	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydrogen Dioxide (Hydrogen Peroxide)	Liquid	1	-	-	2	X	-	-	2	-	1	1	-	-	-	-	-	-	-	-	-
Hydrogen Fluoride	Colorless Gas or Liquid	1	-	-	1	X	X	X	-	2	X	-	-	-	-	1	1	1	-	-	-
Hydrogen Peroxide (35% or less)	Liquid	1	1	1	1	2	X	X	1	X	1	1	1	1	1	X	2	1	1	X	-
Hydrogen Peroxide (50% or less)	Liquid	1	2	1	1	2	X	X	1	X	1	1	1	2	2	X	2	1	1	X	-
Hydrogen Peroxide (70% or less)	Liquid	1	2	1	2	X	X	X	2	-	1	1	1	X	2	X	2	1	1	X	-
Hydrogen Peroxide (90% or less)	Liquid	1	-	1	2	X	X	X	2	-	1	1	-	X	X	X	2	1	1	X	-
Hydrogen Sulfide	Colorless Gas	NO HOSE AVAILABLE														-	-	-	-	-	-
Hydrogen Sulfide, Liquified	Liquid @ 410 PSI, 120°F (49°C)	1	-	-	1	X	X	-	2	X	X	-	-	-	-	-	-	-	-	-	-
Hydrolube (Water Glycol)	Liquid	1	-	1	1	1	-	-	2	2	1	-	-	-	1	-	-	-	-	-	-
Hydrolubric Oil (Houghton)	Liquid	1	1	-	X	2	-	-	-	X	-	-	-	1	2	-	-	-	-	-	-
Hydroquinone	White Crystals	1	1	-	X	-	X	X	X	X	2	X	-	-	-	-	1	1	-	-	-
Hydroquinone Solution	Liquid	1	-	-	-	X	X	-	X	X	1	-	-	-	2	-	1	1	-	-	-
Hydroxyacetic Acid	Colorless Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroxyacetic Acid Solution	Liquid	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Hydroxyethyl Acrylate (HEA)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydroxyethyl Acrylate Acid (HEA Acid)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hydroxyethyl Methacrylate	Clear Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Hydroxyethyl Methacrylate Solution in Xylene	Clear Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Hydroxypropyl Acrylate Acid (HPA Acid)	Liquid	1	1	1	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Hylene (Toluene Diisocyanate)	Yellow Liquid	1	-	-	2	X	X	X	X	2	X	X	-	-	-	-	-	-	-	-	-
Hypochlorous Acid (only in dilute solutions)	Greenish-Yellow Aqueous Sol.	1	1	1	2	X	X	X	X	X	1	2	-	-	-	-	-	-	-	-	-
I																					
Ink (Printers)	Liquid	1	1	-	X	2	X	X	-	X	X	-	-	1	-	2	2	1	-	2	-
Ink Oil	Liquid	1	2	-	-	2	-	-	-	-	-	-	-	-	-	1	1	1	-	1	-
Insulating Oil (Transformer)[1]	Liquid	1	1	-	X	1	X	X	2	X	1	X	-	-	-	1	1	1	-	1	-
Iodine	Grayish Black Granules	1	-	-	-	-	-	1	X	-	-	-	-	-	X	X	X	X	-	-	-
Iodine Solution	Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Iodine, In Alcohol	Liquid	1	1	1	1	-	X	X	2	-	1	-	1	-	1	-	-	-	-	-	-
Iron Acetate Liquor (Black Liquor)	Black Liquid	1	1	1	2	2	X	X	2	2	1	2	2	-	1	1	1	1	-	-	1
Iron Hydroxide	Brown precipitate	1	-	-	1	1	-	X	1	1	1	1	-	-	-	-	-	-	-	-	-
Iron Ore (Hematite)	Black to Brick Red	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Oxide (Black, Brown, Red or Yellow)	Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Oxide Slurry	Slurry	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron Salts	-	1	-	-	1	1	-	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Iron Sulfate Solution (Ferric Sulfate)	Liquid	1	1	1	2	2	2	-	2	2	1	2	1	-	1	X	1	1	X	X	1
Iron Sulfide Solution (Ferrous Sulfide)	Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isoamyl Acetate	Colorless Liquid	1	-	-	2	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Alcohol (Isobutyl Carbinol)	Colorless Liquid	1	-	-	2	2	-	2	2	2	2	2	-	-	-	-	-	-	-	-	-
Isoamyl Bromide	-	1	-	-	X	X	-	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Isoamyl Butyrate	Water White Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Chloride	Colorless to Yellow Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isoamyl Ether	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-
Isoamyl Phthalate	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Isobutane	Colorless Gas	USE LPG HOSE ONLY														-	-	-	-	-	-
Isobutane Liquid	Liquid @ 98 PSIG, 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isobutanol (Isobutyl Alcohol)	Colorless Liquid	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	1	1	1	2	-
Isobutene (Isobutylene)	Gas	1	-	-	X	1	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-
Isobutyl Acetate	Colorless Liquid	1	-	-	X	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Isobutyl Alcohol (Isobutanol)	Colorless Liquid	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	1	1	1	2	-
Isobutyl Aldehyde (Isobutyraldehyde)	Colorless Liquid	1	-	-	2	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Isobutyl Carbinol (Primary Isoamyl Alcohol)	Colorless Liquid	1	-	-	2	2	-	2	2	2	2	2	-	-	-	-	-	-	-	-	-
Isobutylamine	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Isobutylene (Isobutene)	Gas	1	-	-	X	1	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-
Isobutylene Liquid (Isobutene Liquid)	Liquid @ 88 PSIG, 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isobutyraldehyde (Isobutyl Aldehyde)	Colorless Liquid	1	-	-	2	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-
Isocyanate (Toluene Diisocyanate)	Water White to Yellow Liquid	1	2	-	X	X	X	X	X	X	1	-	-	-	-	1	1	1	-	-	-
Isooctane	Colorless Liquid	1	2	-	X	1	X	X	1	X	1	1	2	1	X	1	1	1	2	1	-
Isooctyl Adipate	Viscous Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isooctyl Alcohol	Clear Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isooctyl Thioglycolate	Water White Liquid	1	1	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isopentane	Colorless Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isophorone	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophthaloyl Chloride	Liquid above 106°F (41°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isopropanol (Isopropyl Alcohol)	Colorless Liquid	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Isopropanolamine (MIPA)	Liquid	1	2	-	-	2	-	2	-	1	X	X	-	-	-	-	-	-	-	-	-
Isopropyl Acetate	Colorless Liquid	1	1	1	2	X	X	X	X	2	-	X	-	1	X	1	1	1	1	1	-

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Isopropyl Alcohol (Isopropanol)	Colorless Liquid	1	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	1	2	1
Isopropyl Benzene (Cumene)	Colorless Liquid	1	2	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-
Isopropyl Chloride	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isopropyl Ether	Colorless Liquid	1	1	1	X	X	X	X	X	2	X	X	-	1	X	1	1	1	1	1	-
Isopropylamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	Colorless Liquid	1	2	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-
Isopropyltoluene (Cymene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	1	-	1	1	1	1	1	-
J																					
Jet Fuel A and A1[2]	Liquid	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Jet Fuel JP1[2]	Liquid	1	1	-	X	1	X	X	2	X	1	X	-	1	X	-	-	-	-	-	-
Jet Fuel JP10 (Tetrahydroxydicyclopentadiene)[2]	Liquid	1	-	-	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
Jet Fuel JP4[2]	Liquid	1	1	-	X	1	X	X	2	X	1	X	-	1	X	2	1	1	2	1	-
Jet Fuel JP5[2]	Liquid	1	1	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	2	1	-
Jet Fuel JP8[2]	Liquid	1	1	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	2	1	-
K																					
Kaolin Clay	White to Yellowish Powder	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Karo Syrup	Yellow Liquid	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	-	-	-
Kerosene	Water White Oily Liquid	1	1	-	X	1	X	X	X	X	1	X	1	1	2	1	1	1	1	1	-
Ketchup	Red Liquid	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-	1	1	-	-	-
Ketoglutaric Acid	In Water or Alcohol	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ketones (ie Acetone, MEK, Cyclohexanone)	Generally Liquids	1	1	1	2	X	X	X	X	2	X	X	-	1	X	1	1	1	1	1	-
Koch Acid	White Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
L																					
Lacquer - Alcohol or Acetate as Solvent	Solution	1	1	1	2	-	-	-	-	-	X	-	-	-	-	X	X	1	1	1	-
Lacquer - Toluene or Xylene as Solvent	Solution	1	-	-	-	X	X	X	X	X	1	X	-	1	X	X	X	1	1	1	-
Lactic Acid (90% or less)	Colorless-Yellow Liquid	1	1	1	2	X	2	2	1	-	1	1	-	-	X	X	2	1	X	2	-
Lactic Acid, Food Grade - 50-80%	Colorless to Yellow Liquid	1	1	1	2	-	X	X	-	X	1	1	-	-	-	X	2	1	X	2	-
Lactic Acid, Plastic Grade - 50-80% or less	Colorless to Yellow Liquid	1	1	1	2	1	-	-	1	-	1	1	-	X	1	X	2	1	X	2	-
Lactic Acid, USP 85-90% or less	Colorless to Yellow Syrupy Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	2	1	X	2	-
Lactol	-	1	1	-	-	2	-	-	2	-	-	-	-	-	-	1	1	1	-	1	-
Lard (Fat of the Hog)	Liquid above 108°F (42°C)	1	1	1	X	1	X	X	2	X	1	X	1	1	-	1	1	1	1	X	-
Lard Oil	Colorless to Yellow Liquid	1	1	-	-	-	-	-	2	-	X	-	-	-	-	1	1	1	1	X	-
Lasso (Alachlor)	Colorless Crystals	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-
Latex Paint	Liquid	1	1	1	1	1	2	2	-	2	1	-	-	1	1	1	1	1	1	1	-
Lauryl Peroxide	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauryl Alcohol	Liquid above 75°F (24°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Lead Acetate	White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	1	1	-	1	-
Lead Acetate Solution	Solution	1	1	1	1	2	2	2	-	2	1	-	1	-	1	2	1	1	-	1	-
Lead Arsenate	White Crystals	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Lead Arsenate Solution (In Nitric Acid)	Solution	1	1	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-
Lead Nitrate Solution (In Water or Alcohol)	Solution	1	1	1	1	1	2	2	2	2	1	-	1	-	1	1	1	1	-	-	-
Lead Silicate (basic)	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead Sulphate (Basic, Blue Basic, Tribasic)	White to Blue Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Lead, Tetraethyl (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-	-
Lead, Tetramethyl (Tetramethyl Lead)	Colorless Liquid	1	-	-	X	2	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Lecithin	Light Brown Viscous Liquid-Solid	1	1	-	-	X	-	-	2	-	-	-	-	-	-	-	1	1	-	-	-
Ligroin	Clear Liquid	1	2	-	X	1	X	X	X	X	1	X	-	1	X	2	1	1	-	-	-
Lime (Calcium Oxide)	White to Gray Lumpy Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Lime Sulfur Solution	Solution	1	1	1	2	X	X	X	1	X	1	2	-	-	2	2	1	1	X	X	-
Lime, Chlorinated (Bleaching Solution)	Solution	1	1	1	2	2	2	2	X	2	1	X	-	-	2	X	2	1	-	-	-
Lime, Chlorinated (normal 35-37% Chlorine)	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-
Lime, Hydraulic (Calcined Limestone)	Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Lime, Slaked (Calcium Hydroxide)	White Crystalline Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Limestone	Powder or Lumps	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Limonene	Colorless Liquid	1	2	1	X	X	X	X	-	-	1	-	-	1	-	1	1	1	1	1	-
Lindane (Ag Spray)	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	-
Linoleic Acid	Colorless to Straw Colored Liquid	1	1	1	X	2	-	-	X	X	1	-	-	-	1	-	-	-	-	-	-
Linseed Oil	Yellow Amber to Brown Liquid	1	1	X	2	2	X	X	2	-	1	1	1	1	1	2	1	1	1	2	-
Liquid Soap	Liquid	1	1	1	2	-	2	2	-	2	-	-	-	-	2	1	1	1	1	1	-
Lithium Chloride	White Crystals	-	-	X	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithium Chloride (35-40% Brine)	Solution	X	1	X	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Lubricating Oil Diester Under 135°F (57°C)	Liquid	1	1	-	X	2	X	X	-	X	1	-	-	-	X	1	1	1	1	1	-
Lubricating Oil (SAE 10, 20, 30, 40, & 50)	Liquid	1	-	-	-	2	-	-	2	-	-	-	-	1	-	1	1	1	1	1	-
Lubricating Oil Under 120°F (49°C)	Liquid	1	1	-	X	1	X	X	2	X	1	2	1	1	2	1	1	1	1	1	-
M																					
Machine Oil Under 135°F (57°C)	Liquid	1	1	-	X	1	X	X	1	X	1	2	-	1	2	1	1	1	1	1	-
Magnesite	White to Brown Crystalline Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Acetate	Colorless Crystalline Aggregate	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Acetate Solution	In Water or Alcohol	1	1	1	1	1	1	1	-	1	1	1	1	1	1	-	-	-	-	-	-
Magnesium Carbonate	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	-
Magnesium Carbonate Solution (in Acid)	Liquid Solution	1	1	1	-	-	-	-	-	-	1	-	-	-	-	1	1	1	-	-	-
Magnesium Chloride	Colorless to White Crystals	1	-	1	-	-	-	1	-	-	-	-	-	-	-	X	2	1	X	2	-
Magnesium Chloride Brine	Solution	1	1	1	1	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Chloride, Hydrated (in H2O or Alcohol)	Solution	1	1	1	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Hydroxide	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	-	-
Magnesium Hydroxide Solution (in Dilute Acid)	Liquid Solution	1	1	1	-	-	-	-	-	-	1	-	-	-	-	1	1	1	X	-	-
Magnesium Nitrate	White Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	X	1	-
Magnesium Nitrate Solution (in H2O or Alcohol)	Liquid Solution	1	1	1	1	1	-	-	-	-	1	-	-	-	-	1	1	1	X	1	-
Magnesium Oxide, Dry	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium Oxide, Slurry	-	1	1	-	1	2	-	2	1	-	1	-	-	-	-	-	-	-	-	-	-
Magnesium Sulfate Solution	Liquid Solution	1	1	1	1	1	1	1	2	1	1	1	1	-	1	2	1	1	-	1	-
Malathion (Ag Spray Dilute)	Clear to Amber Liquid	1	1	1	2	-	X	X	-	1	1	-	-	1	1	1	1	1	-	1	-
Malathion (Ag Spray)	Clear to Amber Liquid	1	1	-	2	-	-	-	-	1	-	-	-	1	-	1	1	1	-	1	-
Maleic Acid	Liquid	NO HOSE AVAILABLE														2	2	1	-	-	-
Maleic Acid Solution	Solution	1	1	1	1	2	2	2	X	-	7	-	-	-	X	2	2	1	-	-	-
Maleic Anhydride	Colorless Needles	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maleic Anhydride (Heated Liquid)	Liquid above 124°F (53°C)	1	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malic Acid (dl form)	Colorless Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Malic Acid Solution (in H2O or Alcohol)	Solution	1	1	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Malt Extract (Maltine)	Light Brown Viscous Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Malt, Dry	Yellow to Amber Grain	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Maltine (Malt Extract)	Light Brown Viscous Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Manganese Salts	-	1	1	-	-	1	X	X	-	-	1	1	-	-	1	-	-	-	-	-	-
Manganese Sulfate (Manganous Sulfate)	Pale Red Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese Sulfate Solution	Solution in Water	1	1	-	-	1	2	2	-	-	1	1	1	-	1	-	-	-	-	-	-
Manganese Sulfide (Manganous Sulfide)	Green Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese Sulfite (Manganous Sulfite)	Black to Brownish Red Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
MAPP Gas (Methylacetylene Propadiene)	Liquid	USE 20B-HB HOSE ONLY														-	-	-	-	-	-
Maxmul (Penzoil Hydraulic Fluid)	Liquid	1	-	-	-	1	-	-	2	-	-	-	-	-	-	1	-	1	-	-	-
Mayonnaise	Semi-Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
MBK (Methyl Butyl Ketone)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
MEA (Ethanolamine)	Colorless Viscous Liquid	1	1	1	2	2	2	2	2	1	X	X	1	-	2	-	-	-	-	-	-
MEK (Ethyl Methyl Ketone)	Colorless Liquid	1	2	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Mercuric Chloride	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	1	1	X	X	-
Mercuric Chloride Solution (in H2O, or Alcohol)	Solution	1	1	-	2	2	2	1	1	2	-	1	1	-	2	X	1	1	X	X	-
Mercuric Cyanide	Colorless Transparent Prisms	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	X	-	-
Mercuric Cyanide Solution (in H2O or Alcohol)	Solution	1	1	-	2	2	2	2	1	2	-	1	-	-	-	-	-	-	X	-	-
Mercurous Nitrate Solution	Solution	1	1	1	2	-	-	-	-	-	1	-	-	-	-	1	1	1	X	-	-
Mercury	Silver Liquid	1	1	1	-	2	2	2	1	2	-	1	1	-	1	1	1	1	X	X	-
Mercury Vapor	Gas	NO HOSE AVAILABLE														1	1	1	-	-	-
Mesityl Oxide (Methyl Isobutenyl Ketone)	Colorless Oily Liquid	1	1	1	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
Mesitylene (Trimethylbenzene)	Liquid	1	-	-	X	X	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Metallic Soaps (Aluminium, Calcium, Zinc)	Solids @ Room Temperature	1	1	1	X	1	X	X	-	X	1	2	1	-	-	1	1	1	1	1	-
Methallyl Alcohol (Methylallyl Alcohol)	Colorless Liquid	1	-	-	-	1	-	2	-	2	2	2	-	-	-	-	-	-	-	-	-
Methane	Gas	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methanol (Methyl Alcohol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	X	1	1	1	2	1	1	1	1	2	-
Methionine	White Crystalline Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor Solution (in Alcohol)	Solution	1	1	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	-	-	-
Methyamine (Monomethylamine)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	X	1	1	1	-	-	-
Methyl Acetate	Colorless Liquid	1	2	-	2	X	X	X	X	2	X	X	1	1	X	1	1	1	1	1	-
Methyl Acetoacetate	Colorless Liquid	1	-	-	2	X	-	X	X	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Acetone	Water White Liquid	1	-	-	1	X	-	X	-	2	X	X	-	-	1	-	-	-	-	-	-
Methyl Acrylate (Inhibited)	Colorless Liquid	1	2	-	2	X	X	X	X	X	X	X	-	-	-	1	1	1	1	1	-
Methyl Acrylate Acid(Methylacrylic Acid)	White Solid	1	1	1	2	2	X	X	-	1	1	-	1	X	-	-	-	-	-	-	-
Methyl Alcohol (100%) (Methanol)	Colorless Liquid	1	1	1	1	1	1	1	1	1	X	1	1	1	2	1	1	1	1	2	-
Methyl Bromide	Liquid @ 55 PSIG @ 120°F (49°C)	1	1	-	X	X	X	X	X	X	1	X	-	1	X	1	1	1	-	1	-
Methyl Bromoacetate	Colorless to Straw Colored Liquid	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Butanathiol (Butyl Mercaptan)	Liquid	1	1	-	X	-	X	X	-	X	1	-	-	-	X	-	1	1	-	-	-
Methyl Butanol (2-Methyl-1-Butanol)	Colorless Liquid	1	1	1	1	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-	-
Methyl Butyl Ketone (MBK)	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
Methyl Carbitol (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Methyl Cellosolve (Diethylene Glycol Methyl Ether)	Colorless Liquid	1	1	-	1	-	X	X	-	X	1	X	1	-	-	-	-	-	-	-	-
Methyl Chloride	Liquid @ 160 PSIG @ 120°F (49°C)	1	2	-	X	X	X	X	X	X	1	X	X	-	X	1	1	1	-	1	-
Methyl Chloroform (1,1,1 Trichloroethane)	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Methyl Chloroformate	Colorless Liquid	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Methyl Cyanide (Acetonitrile)	Colorless Liquid	1	1	2	2	X	2	2	X	X	X	X	1	-	1	1	1	1	-	-	-
Methyl Cyclohexane	Colorless Liquid	1	-	-	X	1	X	X	-	X	1	X	2	1	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	Colorless Liquid	1	2	1	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-
Methyl Formate	Colorless Liquid	1	1	-	2	X	X	X	2	2	X	X	-	-	-	1	1	1	1	1	-
Methyl Hexanol	-	1	-	-	-	1	-	1	-	1	2	1	-	-	-	-	-	-	-	-	-
Methyl Hexanone (Methyl Isoamyl Ketone)	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Hexyl Ketone	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Isoamyl Ketone (Methyl Hexanone)	Colorless Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Methyl Isobutenyl Ketone (Mesityl Oxide)	Colorless Oily Liquid	1	1	1	2	X	X	X	X	2	X	X	2	-	X	1	1	1	1	1	-
Methyl Isobutyl Ketone (MIBK)	Colorless Liquid	1	2	-	-	X	X	X	X	2	X	X	2	1	X	-	-	-	-	-	-
Methyl Isopropyl Ketone	Colorless Liquid	1	2	-	2	X	X	X	X	2	X	X	2	1	X	1	1	1	1	1	-
Methyl Methacrylate	Colorless Liquid	1	2	-	2	X	X	X	X	X	X	2	2	-	1	1	1	1	-	-	-
Methyl Methacrylate Monomer, Inhibited	Colorless Liquid	1	-	-	X	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-	-
Methyl Phenol (Cresol)	Liquid above 95°F (35°C)	1	2	-	-	X	X	X	X	2	1	X	1	X	-	2	1	1	1	-	2
Methyl Propyl Carbinol (2 Pentanol)	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Methyl Propyl Ether	Colorless Liquid	1	-	-	-	X	-	X	-	X	-	2	-	-	-	-	-	-	-	-	-
Methyl Propyl Ketone (Pentanone)	Water White Liquid	1	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Methyl Salicylate	Yellow to Red Liquid	1	1	-	2	2	-	-	2	2	-	-	-	-	1	1	1	1	1	1	-
Methyl Stearate	Liquid above 99°F (38°C)	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Sulfate (Dimethyl Sulfate)	Colorless Liquid	1	1	-	X	X	X	X	X	2	X	X	-	1	1	-	-	-	-	-	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Methyl-2-Pyrrolidone	Colorless Liquid	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-n-Amyl Carbinol	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Methyl-n-Amylketone	Water White Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylacetylene Propadiene (MAPP Gas)	Liquid @ 107 PSIG @ 20°C	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methylacrylic Acid (Crotonic Acid)	White Crystalline Solid	1	1	1	2	2	X	X	-	1	1	-	1	X	-	-	-	-	-	-	-
Methylal	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Methylallyl Alcohol (Methallyl Alcohol)	Colorless Liquid	1	-	-	-	1	-	2	-	2	2	2	-	-	-	-	-	-	-	-	-
Methylallyl Chloride	Colorless to Straw Colored Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methylamine (30-40% in H2O)	Colorless Liquid	1	1	-	2	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Methylamine (Anhydrous)	Liquid @ 120 PSIG @ 49°C	1	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Methylamyl Acetate	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylamyl Alcohol	Colorless Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Methylaniline	Colorless to Brown Liquid	1	1	1	2	X	-	-	X	-	1	2	-	X	X	-	-	-	-	-	-
Methyldiethanolamine	Colorless Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Bromide	Clear Liquid	1	-	-	-	2	-	-	-	-	1	-	-	-	X	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	Colorless Liquid	1	1	2	X	X	X	X	X	X	2	X	X	X	X	1	1	1	1	1	-
Methylene Dichloride	Colorless Liquid	1	1	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	X	1	-
Methylene Dichloride (Methylene Chloride)	Colorless Liquid	1	1	2	X	X	X	X	X	X	1	X	X	X	X	1	1	1	X	1	-
Methylene Diphenyl Diisocyanate, MDI	Liquid above 37°C	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylstyrene	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
MIBK (Methyl Isobutyl Ketone)	Colorless Liquid	1	2	-	-	X	X	X	X	2	X	X	2	1	X	-	-	-	-	-	-
Milk	White Liquid	USE FDA HOSE ONLY														-	-	-	-	-	-
Mineral Oil	Colorless Liquid	1	1	1	X	1	X	X	1	X	1	1	1	1	1	1	1	1	2	1	-
Mineral Spirits (VM&P Naphtha)	Colorless Liquid	1	1	-	X	1	X	X	-	X	1	X	-	1	-	1	1	1	2	1	-
MIPA (Isopropanolamine)	Liquid	1	-	-	-	2	-	2	-	1	X	X	-	-	-	-	-	-	-	-	-
Mobile Therm 603	Liquid	1	1	-	-	1	-	-	-	-	1	-	-	-	-	1	1	1	1	1	-
Molasses	Brown Liquid	1	1	-	1	2	2	2	2	1	1	1	-	-	2	2	1	1	2	X	-
Monochloroacetic Acid	Colorless to Light Brown Crystals	1	1	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monochloroacetic Acid Solution (in H2O or Alcohol)	Liquid Solution	1	1	X	2	-	-	-	-	-	-	-	-	X	-	X	X	X	-	2	1
Monochlorobenzene	Clear Liquid	1	2	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	-	1	-
Monoethanolamine	Colorless Liquid	1	2	1	2	2	2	2	2	2	X	X	1	1	2	1	1	1	-	1	-
Monoethylamine	Liquid @ 15 PSIG @ 120°F (49°C)	1	2	-	1	X	X	X	X	2	X	X	1	-	-	-	1	1	-	1	-
Monoethylamine Solution (70% or less)	Liquid Solution	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoglycerides	Liquid to Solid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monomethylamine (Methyamine)	Liquid @ 120 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	X	1	1	1	-	-	-
Monopentaerythritol (Pentaerythritol)	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Monopentaerythritol Solution	Liquid Solution	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Monosodium Phosphate (Monobasic)	White Powder	1	1	-	2	-	2	2	X	2	-	-	1	1	1	-	1	1	X	X	-
Morpholine	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mortar, Inorganic	Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Motor Oil	Liquid	1	1	-	X	1	X	X	2	X	1	2	1	1	2	1	1	1	1	1	-
Mould Oil	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-
Mouth Wash	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
MTBE (Methyl Tertiary Butyl Ether)	Colorless Liquid	-	2	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Muriatic Acid (Hydrochloric)	Colorless to Yellow Liquid	1	1	1	X	X	2	2	X	2	1	2	1	X	X	X	X	X	X	X	-
Mustard	Liquid	1	-	-	-	-	1	1	1	1	-	1	-	-	-	X	1	1	-	-	-
N																					
n-Hexaldehyde	Colorless Liquid	1	1	-	2	X	X	X	2	1	-	-	-	-	-	-	-	-	-	-	-
N-Methyl-2-Pyrrolidone	Colorless Liquid	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Octane	Colorless Liquid	1	2	1	X	1	X	X	-	X	1	X	1	1	X	-	-	-	-	-	-
Naphtha (Low Aromatic Content)	Liquid	1	1	-	X	2	X	X	X	X	1	X	1	-	X	2	1	1	-	1	-
Naphthalene	White Crystalline Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Naphthenic Acid	Commercial Grade is Dark Fluid	1	1	-	-	2	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Neohexane	Colorless Liquid	1	-	-	X	1	-	-	2	-	1	-	-	1	-	-	-	-	-	-	-
Neutral Oil	Liquid	1	1	1	X	2	X	X	2	X	1	-	-	1	-	1	1	1	-	1	-
Nickel Acetate	Green Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	1	-
Nickel Acetate Solution (In Water or Alcohol)	Solution	1	1	1	2	-	2	2	-	1	-	-	-	-	-	1	1	1	1	1	-
Nickel Carbonate	Green to Brown Crystals/Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel Chloride	Brown Deliquescent Scales	-	-	-	-	-	-	1	-	-	-	-	-	-	-	X	2	2	X	X	-
Nickel Chloride Solution (In Water or Alcohol)	Solution	1	1	-	2	2	2	2	2	2	1	2	1	-	1	X	2	2	X	X	-
Nickel Nitrate	Green Deliquescent Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	X	-	-
Nickel Nitrate Solution (In Water or Alcohol)	Solution	1	1	-	2	2	2	2	2	2	1	2	1	-	2	-	-	2	X	-	-
Nickel Plating Solution	Liquid	1	1	-	-	2	2	2	-	-	-	2	-	-	X	-	1	1	-	-	-
Nickel Salts	-	1	1	-	1	1	1	1	1	1	1	1	-	1	2	-	-	-	-	-	-
Nickel Sulfate	Yellow Green to Blue Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	1	X	X	-
Nickel Sulfate Solution	Solution	1	1	-	2	2	2	2	2	2	1	2	1	-	1	-	2	1	X	X	-
Nicotine Salts (ie Nicotine Hydrochloride)	Colorless Oil	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	X	2	-	-	-
Niter Cake (Sodium Bisulfate)	Colorless Crystals to White Lumps	1	1	-	1	1	1	1	1	1	1	1	1	1	1	X	1	1	X	X	-
Niter Cake Solution	Solution	1	1	1	2	-	X	X	-	2	1	1	1	-	-	-	-	-	-	-	-
Nitric Acid (25% or less)	Colorless Liquid	1	1	1	2	X	X	X	X	2	1	2	1	X	X	X	2	2	-	X	-
Nitric Acid (10%)	Transparent or Yellowish Liquid	1	1	1	1	X	X	X	X	2	1	2	1	X	X	X	2	2	-	X	-
Nitric Acid (25%)	Transparent or Yellowish Liquid	1	1	1	2	X	X	X	X	2	1	2	1	X	X	X	2	2	-	X	-
Nitric Acid (35% or less, 26 Degrees Baume)	Colorless Liquid	1	1	1	2	X	X	X	X	2	1	1	X	X	X	X	2	2	-	X	-
Nitric Acid (52% or less, 36 Degrees Baume)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (61% or less, 40 Degrees Baume)	Colorless to Yellow Liquid	1	2	X	X	X	X	X	X	X	1	2	X	X	X	X	2	2	-	X	-
Nitric Acid (63.5% or less)	Transparent or Yellowish Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	2	2	-	X	-
Nitric Acid (67% or less, 42 Degrees Baume)	Colorless to Yellow Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	2	2	-	X	-
Nitric Acid (95% or less, 48.5 Degrees Baume)	Yellow Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	X	2	2	-	X	-
Nitric Acid (Red Fuming)	Red Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Nitrobenzene	Yellow Liquid @ 43°F (6°C)	1	2	-	2	X	X	X	X	X	2	X	X	2	X	1	1	1	1	1	-
Nitroethane	Colorless Liquid	1	1	-	2	X	2	2	X	2	-	2	1	-	-	-	1	1	-	1	-
Nitrogen (Cryogenic Liquid)	Liquid	NO HOSE AVAILABLE														1	1	1	1	1	-
Nitrogen (Gas)	Colorless Gas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
Nitrogen Dioxide (Nitrogen Tetroxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nitrogen Fertilizer (Ammonia, Urea)	Solutions in Water	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen Oxide (Nitrous Oxide)	Gas	1	1	-	2	X	X	X	X	1	1	1	1	X	X	1	1	1	-	X	-
Nitrogen Tetroxide (Nitrogen Dioxide)	Liquid @ 50 PSIG @ 120°F (49°C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nitromethane	Colorless Liquid	1	-	-	2	X	-	2	X	2	X	X	-	1	X	-	1	1	-	1	-
Nitropropane	Colorless Liquid	1	1	-	2	X	X	X	X	2	X	-	-	1	-	-	1	1	-	1	-
Nitrosyl Chloride	Yellow-Red Liquid or Gas	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Nitrous Acid (Up to 10%)	Light Blue Liquid	1	1	1	-	-	-	-	1	-	-	1	-	1	1	X	1	1	X	X	-
Nitrous Oxide (Nitrogen Oxide)	Gas	1	1	-	2	X	X	X	X	1	1	1	1	X	X	1	1	1	X	-	-
Nitrous Oxide, Compressed Liquid	Liquid @ 800 PSIG @ 68°F (20°C)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonene (1-nonylene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nonyl Alcohol (Octyl Carbinol)	Colorless Liquid	1	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Nonylene (Nonene)	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
O																					
Octadecanoic Acid (Stearic Acid)	Colorless Waxy Solid	1	1	1	2	2	2	2	2	2	1	2	1	1	1	X	2	1	X	X	-
Octanoic Acid (Caprylic Acid)	Colorless Oily Liquid	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Octanol (Octyl Alcohol)	Colorless Liquid	1	1	-	-	2	2	2	2	-	1	-	1	1	2	1	1	1	1	2	-
Octene	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Octyl Acetate	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	1	-	-	-	-	-	-	-	-	-
Octyl Alcohol (Octanol)	Colorless Liquid	1	1	-	-	2	2	2	2	-	1	-	1	1	2	1	1	1	1	2	-
Octyl Aldehyde	Colorless Liquid	1	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	-	-	-

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Octyl Carbinol (Nonyl Alcohol)	Colorless Liquid	1	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Octyl Phenol (Diisobutyl Phenol)	White Flakes	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Octylamine	Water White Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Oil (SAE Motor Oils)	Liquid	1	1	-	X	1	X	X	2	X	1	2	1	1	2	-	-	-	-	-	-
Oil of Turpentine	Liquid	1	2	2	X	1	X	X	2	X	1	X	-	1	1	-	-	-	-	-	-
Oils, Animal (High Fatty Acid Content)	Solid to Liquids	1	2	-	X	1	X	X	2	2	1	X	1	-	2	1	1	1	1	1	-
Oils, Mineral (Aliphatic or Aromatic)	Liquids	1	2	-	X	2	X	X	X	X	1	2	2	1	X	-	-	-	-	-	2
Oils, Vegetable (Soybean, Coconut, Corn)	Liquids	1	1	-	X	1	X	X	-	X	1	X	-	1	-	-	-	-	-	-	1
Oleic Acid (fatty acid)	Yellow to Red Oily Liquid	1	2	2	2	2	X	X	2	2	2	X	2	-	2	2	2	1	1	2	1
Oleum (Fuming Sulfuric, 30% SO3 or less)	Clear to Off White Fuming Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	1	-	-	X
Olive Oil	Yellow to Green Liquid	1	1	1	2	2	X	X	X	2	1	X	2	1	2	2	1	1	1	2	1
Ortho-Dichlorobenzene (also meta and para)	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	X	1	X	-	1	1	-	1	-
Ortho-xylene (1,2 Dimethylbenzene)	Clear Colorless Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
OS 45 Hydraulic Fluid (Silicate Ester Base)	Liquid	1	-	-	X	2	X	X	1	X	1	2	-	-	-	-	-	-	-	-	-
Oxalic Acid	Transparent Crystals	1	-	2	-	-	-	1	-	-	-	-	-	-	-	X	2	1	2	X	1
Oxalic Acid (50%)	Crystals in H2O	1	2	1	2	X	X	X	X	2	1	2	1	X	X	-	-	-	-	-	-
Oxygen	Colorless Gas	1	1	-	1	2	2	2	-	1	1	1	1	-	-	-	-	-	-	-	-
Oxygen, Refrigerated Liquid	Liquid @ 200 PSIG @ -146°C	NO HOSE AVAILABLE														-	-	-	-	-	-
Ozone	Gas	1	2	2	1	X	X	X	2	2	2	2	1	2	1	1	1	1	1	1	1
P																					
Paint (Emulsion or Latex)	Liquid	1	1	1	2	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-
Paint (Inorganic)	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-
Paint (Oil or Solvent Based)	Liquid or Paste	1	1	-	X	2	X	X	-	X	1	X	-	1	-	-	-	-	-	-	-
Paint Remover	Liquid or Paste	1	2	-	X	X	X	X	X	X	1	X	-	X	-	-	-	-	-	-	-
Paint Resin	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palm Oil	Yellow to Brown Solid	1	1	-	-	1	X	X	2	2	-	2	-	-	-	1	1	1	1	1	-
Palmitic Acid (Hexadecanoic Acid)	Crystals in Hot Alcohols	1	1	1	2	2	X	X	2	2	1	X	1	-	-	1	2	1	1	X	1
Papermakers Alum (Aluminum Ammonium Sulfate)	In Water	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paraffin (Aliphatic Hydrocarbon)	Varies from Gas to Waxy Solid	1	1	1	X	1	X	X	2	X	1	X	1	-	-	2	1	1	-	1	-
Paraformaldehyde	White Solid - Flakes or Powder	1	-	-	-	2	-	1	2	-	-	-	-	-	1	-	1	1	1	-	-
Paraldehyde	Colorless Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paranox (Detergent, Disperser; Exxon)	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parapol (Liquid Polyisobutylene; Exxon)	Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Peanut Oil	Yellow to Green Liquid	1	1	-	-	1	-	-	2	X	-	-	-	-	2	1	1	1	1	1	1
Pelargonic Acid	Colorless to Yellow Oil	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloroethane	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol In Oil	In Oil (Wood Preservative)	1	1	1	X	X	X	X	X	1	1	-	-	-	X	-	-	-	-	-	-
Pentaerythritol (Monopentaerythritol)	White Powder	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentane	Colorless Liquid	1	X	X	X	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Pentanol (Methyl Propyl Carbinol)	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-
Pentanone (Methyl Propyl Ketone)	Water White Liquid	1	-	-	2	X	-	X	X	2	X	X	-	-	X	-	-	-	-	-	-
Pentasol (Amyl alcohols, primary and secondary)	Liquid	1	2	2	2	2	2	2	2	2	1	2	1	1	2	1	1	1	1	1	-
Perchloric Acid (70%)	70% or Less with H2O	1	2	1	-	-	2	2	2	2	1	2	-	X	X	-	2	1	-	-	1
Perchloroethylene	Colorless Liquid	1	2	-	X	X	X	X	X	X	1	X	2	2	X	1	1	1	-	X	-
Petroleum Coke	Solid Pellets	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Petroleum Distillate	Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Petroleum Ether (Naptha)	Liquid	1	1	-	X	2	X	X	X	X	1	X	1	-	X	2	1	1	-	1	-
Petroleum Naphtha (Toluene/cyclohexane/Xylene)	Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Petroleum Naphtha Flash Point Over 200 Degrees	Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Petroleum Oils (Refined)	Liquid	1	1	1	X	1	X	X	2	X	1	2	-	1	1	-	-	-	-	-	-
Petroleum Oils (Sour)	Liquid	1	1	1	X	1	X	X	2	X	1	X	-	-	2	-	-	-	-	-	-
Petroleum Paraffin Wax	Solid with low Melt Points	1	2	2	X	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Phenol (Carbolic Acid)	White or Pink Crystals	1	2	-	2	X	X	X	X	2	1	X	1	X	X	X	1	1	2	X	-
Phenol Acid	95% or less with H2O	1	2	2	2	X	X	X	X	2	1	X	1	X	X	X	1	1	_	X	-
Phenolates	-	1	-	-	-	X	-	-	X	-	2	X	-	2	-	-	-	-	-	-	-
Phenolsulfonic Acid	Yellow to Brown Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phenothiazine	Greenish Powder or Flakes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenyl Acetate	Water White Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenyl Chloride (Chlorobenzene)	Clear Volatile Liquid	1	2	-	X	X	X	X	X	X	1	X	X	X	X	1	1	1	1	1	X
Phenylenediamine (ortho)	Colorless to Red Solid Needles	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorone (Diisopropylidene Acetone)	Yellow Liquid	1	1	-	2	X	X	X	X	2	X	X	-	-	-	1	1	1	-	1	-
Phosgene (Carbonyl Chloride)	Gas, Liquid 60 PSI @ 120°F (49°C)	1	X	X	X	X	X	X	X	2	1	X	-	2	-	-	-	-	-	-	-
Phosphate Ester Hydraulic Fluid	Liquid	1	1	1	1	X	X	X	X	-	-	X	-	2	-	-	-	-	-	-	-
Phosphate Rock	Solid	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate, Trisodium	In Water	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (100%)	Crystals	1	2	X	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid (35% or less)	Colorless Liquid	1	1	1	1	2	2	2	2	2	1	1	1	-	-	X	1	1	X	2	1
Phosphoric Acid (50%)	Colorless Liquid	1	1	1	1	2	2	2	2	2	1	1	1	X	X	X	1	1	X	2	1
Phosphoric Acid (75%)	Colorless Liquid	1	2	1	2	-	-	-	-	-	1	1	1	X	X	X	2	2	X	X	1
Phosphoric Acid (85%)	Syrupy Liquid	1	2	1	2	X	X	X	X	X	1	1	1	X	X	X	2	2	X	X	1
Phosphoric Acid (90%)	Syrupy Liquid	1	2	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Phosphoric Acid, Spent	Liquid	1	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Photographic, Developers	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Photographic, Emulsions	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Photographic, Fixing Solutions	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Phthalic Acid	Colorless Crystals	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic Acid (50%)	Colorless Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phthalic Anhydride, Molten	White Crystalline Solid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Picric Acid (Solution)	In Water	1	2	2	2	-	-	-	-	-	1	-	-	-	-	X	1	1	X	X	1
Picric Acid (Trinitrophenol)	Yellow Crystals	1	2	2	2	2	2	2	2	2	1	2	-	X	1	X	1	1	X	X	1
Pine Oil	Colorless to Amber Liquid	1	1	-	X	2	X	X	-	X	2	X	2	-	-	-	-	-	-	-	-
Pine Tar	Viscous Brown to Black Liquid	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Pinene	Colorless Transparent Liquid	1	1	-	X	2	X	X	X	X	1	-	2	1	X	1	1	1	-	-	-
Piperazine Hydrochloride Solution (34%)	In Water	1	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pitch	In Aromatic Hydrocarbons	1	2	X	X	2	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
Plating Solution Chrome Under 120°F (49°C)	Liquid	1	1	-	2	-	-	-	-	2	2	-	-	X	X	-	X	X	-	-	1
Pluronic (Block Polymer with Hydroxyl by BASF)	Liquid	1	1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Polyester Plastic	-	1	1	-	-	-	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-
Polyethylene Glycol	Colorless Liquid to glassy Solid	1	-	-	1	2	-	1	1	1	1	1	-	2	2	-	-	-	-	-	-
Polyethylene Plastic	Solid Beads	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polypropylene Glycol	Liquid	1	1	-	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Polypropylene Plastic	Solid Beads	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polystyrene Plastic	Solid Beads	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Polyurethane Foam Under 125°F (52°C)	-	1	1	-	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
Polyvinyl Acetate - Emulsions	Emulsion	1	-	-	1	1	-	1	2	1	-	1	-	-	-	-	-	-	-	-	-
Potash (Potassium Carbonate) Aqueous Solution	Liquid	1	1	-	1	-	1	1	1	1	1	1	-	1	1	2	1	1	-	X	1
Potassium Acetate	White Powder	1	1	-	2	2	2	2	2	2	X	2	1	-	1	-	1	1	-	-	1
Potassium Bicarbonate	Colorless crystal or white Powder	1	1	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Bisulfate	Colorless crystal	1	1	-	1	1	1	1	1	1	1	1	1	-	1	-	-	-	-	-	-
Potassium Bromate	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Potassium Bromide	White Crystals or Powder	1	1	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Carbonate	White granular Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	X	1
Potassium Carbonate, Liquid	Colorless to Cloudy Liquid	1	1	-	1	1	1	1	1	1	1	1	-	1	1	2	1	1	-	X	1
Potassium Chlorate	Colorless to white Powder	1	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-

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Potassium Chloride	Colorless to white Solid	1	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Chloride, Dry	White Solid	1	1	-	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-
Potassium Chromate	Yellow Crystal	1	2	-	2	X	X	X	2	2	1	2	1	2	1	-	-	-	-	-	1
Potassium Cuprocyanide	White Crystalline Solid	1	-	-	1	1	1	1	1	1	1	1	-	2	1	-	-	-	-	-	1
Potassium Cyanide	White Crystal	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Potassium Dichromate	White Crystalline Powder	1	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	-
Potassium Ferrocyanide	Yellow Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Potassium Fluoride	White Crystalline Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Potassium Hydrate	White Solid	1	-	-	2	2	2	2	2	1	X	1	-	2	2	-	-	-	-	-	-
Potassium Hydroxide (45% Caustic Potash)	Colorless to Cloudy Liquid	1	1	1	2	2	2	2	-	1	2	-	1	1	1	-	-	-	-	-	-
Potassium Hydroxide, Liquid	Colorless to Cloudy Liquid	1	1	-	1	2	2	2	2	1	X	2	-	X	X	-	-	-	-	-	-
Potassium Iodide	White Solid	1	-	-	1	1	-	-	1	-	1	1	-	-	1	-	-	-	-	-	2
Potassium Nitrate	Colorless to white Solid	1	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Permanganate	Dark purple Crystal	1	1	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-
Potassium Persulfate	White Crystal	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Potassium Phosphate	Colorless to white Crystal	1	-	-	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-
Potassium Silicate, Other Than Dry	-	1	1	-	1	1	2	-	1	-	1	-	-	-	-	-	-	-	-	-	-
Potassium Sulfate	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-
Potassium Sulfide	Red or yellow Crystal or Solid	1	1	-	1	1	-	-	1	1	1	2	-	-	-	-	-	-	-	-	-
Potassium Sulfite	White Crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-
Potassium Thiosulfate	Colorless crystal	1	-	-	1	-	-	-	1	-	1	1	-	-	1	-	-	-	-	-	-
Primatol A, S, P (Ag Spray)	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propane Gas	Colorless Gas	CONTACT DENVER PRODUCT APPLICATION														-	-	-	-	-	-
Propanediol	Colorless Liquid	1	1	-	1	1	-	-	X	1	1	2	-	-	-	-	-	-	-	-	-
Propanol (Propyl Alcohol)	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	-	1	1	2	-	-	-	-	-	-
Propionic Acid	Colorless Oily Liquid	1	1	1	2	X	2	2	X	2	1	2	-	-	-	1	1	-	-	-	-
Propyl Acetate	Colorless Liquid	1	1	1	-	-	-	-	-	-	X	-	2	-	-	-	-	-	-	-	-
Propyl Alcohol (Propanol)	Colorless Liquid	1	1	1	1	-	-	-	-	1	1	-	1	1	2	-	-	-	-	-	-
Propyl Aldehyde	White-water Liquid	1	-	-	-	X	-	X	-	2	X	X	-	-	-	-	-	-	-	-	-
Propyl Chloride	Colorless Liquid	1	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
Propylene	Colorless Gas	1	-	-	X	X	X	X	X	X	1	X	-	-	-	-	-	-	-	-	-
Propylene Diamine	Colorless Liquid	1	-	-	-	2	-	2	-	2	-	X	-	-	-	-	-	-	-	-	-
Propylene Dichloride (Dichloropropane)	Colorless Liquid	1	-	-	X	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Propylene Glycol	Liquid	1	1	-	1	1	1	1	1	1	1	1	1	2	1	-	-	-	-	-	-
Propylene Oxide	Colorless Liquid	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Purina Insecticide	-	1	1	-	2	X	-	-	X	2	2	-	-	2	-	1	1	1	1	2	-
Puropale RX Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
Pydraul 10E, 29E-LT, 30E, 60, 65E, 115SE	Liquid	1	1	-	2	X	-	-	-	2	-	-	2	-	X	1	1	1	1	1	-
Pydraul 135	Liquid	1	1	-	-	X	-	-	-	2	1	-	2	2	-	1	1	1	-	-	-
Pydraul 150	Liquid	1	1	-	2	X	X	X	X	2	1	X	2	2	X	1	1	1	1	1	-
Pydraul 280	Liquid	1	1	-	2	X	X	X	X	2	2	X	2	2	X	1	1	1	-	-	-
Pydraul 312	Liquid	1	1	-	X	X	X	X	X	X	1	-	2	1	X	1	1	1	-	-	-
Pydraul 50E	Liquid	1	1	-	2	-	-	-	-	2	2	-	2	1	X	-	-	-	-	-	-
Pydraul 540	Liquid	1	1	-	X	X	X	X	X	X	1	X	2	X	X	1	1	1	-	-	-
Pydraul 625	Liquid	1	1	-	2	X	X	X	X	2	1	X	2	2	X	1	1	1	-	-	-
Pydraul A-200	Liquid	1	1	-	X	X	X	X	X	X	1	X	2	2	X	1	1	1	-	-	-
Pydraul F-9	Liquid	1	2	-	2	X	X	X	X	2	1	X	2	2	-	1	1	1	-	-	-
Pyrene (Carbon Tetrachloride)	Colorless Liquid	1	2	X	X	X	X	X	X	X	1	X	2	1	X	X	2	2	X	2	X
Pyrethrum	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Pyridine (50%)	-	1	2	-	-	-	-	-	X	-	X	X	-	-	X	-	1	1	1	1	-
Pyrogard 160, 230, 630	Liquid	1	1	-	-	-	-	-	-	-	2	-	-	-	-	1	1	1	-	-	-
Pyrogard 51, 53, 55	Liquid	1	1	-	2	X	-	-	-	2	-	-	-	-	-	1	1	1	-	-	-

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Pyrogard C, D	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
Pyronal (Transformer Oil)	Liquid	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Q																					
Quenching Oil	Liquid	1	-	-	-	2	-	-	2	-	-	-	-	-	-	-	1	1	1	-	-
Quintolubric 822	Liquid	1	1	-	2	1	-	-	2	X	1	-	-	1	-	1	1	1	1	1	-
R																					
Ramrod (Ag Spray)	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	1	1	1	1	1	-
Rando Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	-	1	1	1	1	1	-
Rape Seed Oil	Brownish to yellow Liquid	1	1	-	2	-	-	-	-	2	-	X	-	2	-	1	1	1	1	1	-
Red Oil (Commercial Oleic Acid) (MIL-5606)	Liquid	1	2	2	2	2	X	X	2	2	2	X	2	1	2	2	2	1	1	2	1
Refined Wax (Petroleum)	-	1	1	-	-	1	X	X	2	-	1	-	-	1	-	1	1	1	-	1	-
Regal Oils R&O	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-
Richfield "A" Weed Killer	-	1	1	-	X	2	X	X	X	X	2	X	-	-	2	-	-	-	-	-	-
Road Paving Compound	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Road Tar	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubilene Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	-	-	-	-	-	-
S																					
Salicylic Acid	White Powder	1	1	1	2	X	2	2	-	2	2	-	-	1	1	-	1	1	2	-	-
Salt Water (Sea Water)	Liquid	1	1	-	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2	-
Sauerkraut	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Sea Water	Colorless Liquid	1	1	-	1	2	2	X	2	1	1	2	-	1	1	2	1	1	-	2	-
Sevin	-	1	2	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Sewage	Sludge	1	1	1	1	2	2	X	2	-	-	2	1	1	2	X	1	1	2	1	-
Shampoo	Liquid	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shellac	Orange to colorless flake	1	-	X	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Shortening	-	1	-	-	X	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicate of Soda	Brownish or yellow Liquid	1	1	-	1	1	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-
Silicone Greases	Liquid	1	2	-	-	2	-	-	2	-	2	2	-	1	2	1	1	1	-	1	-
Silicone Oils	Liquid	1	2	-	-	2	-	-	2	-	2	2	-	1	2	1	1	1	-	1	-
Silver Cyanide	White Powder	1	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Silver Nitrate	Colorless crystal	1	1	-	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	-
Skydrol 500A & 7000	Liquid	1	1	-	1	X	X	X	X	2	X	X	2	1	X	1	1	1	1	-	-
Soap Oil	Liquid	1	1	2	-	X	-	-	X	-	-	X	-	-	-	1	1	1	-	-	-
Soap Solutions	Liquid	1	1	1	1	1	X	X	2	1	1	1	1	1	1	1	1	1	1	1	-
Soap, Liquid	Liquid	1	1	-	1	1	2	2	1	2	1	1	-	2	2	1	1	1	-	-	-
Soda Ash (Sodium Carbonate)	Grayish Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	2	1
Soda Water	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Sodium Acetate	Colorless crystal	1	1	-	2	X	2	2	X	2	X	X	1	1	1	1	1	1	1	1	-
Sodium Aluminate Solution	Colorless to cloudy Liquid	1	1	-	1	1	2	2	1	1	1	1	-	2	2	-	-	-	-	-	-
Sodium Benzoate	White Crystals or Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Sodium Bicarbonate	White Crystal or Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	-
Sodium Bichromate Solution	Red to clear Liquid	1	1	-	1	2	2	2	2	1	1	2	-	2	2	-	-	-	-	-	-
Sodium Bisulfate (Niter Cake)	Colorless Crystals to White Lumps	1	1	-	1	1	1	1	1	1	1	1	1	1	1	X	1	1	X	X	-
Sodium Bisulfite	White Crystals or Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Sodium Borate (Borax)	White Crystals	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	-	2	1
Sodium Carbonate (Soda Ash)	Grayish Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	2	1
Sodium Chlorate	Colorless Crystals	1	-	-	1	1	1	1	2	2	1	1	-	1	1	-	-	-	-	-	1
Sodium Chloride	Colorless to white Crystals	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	X	X	-
Sodium Chlorite Solution	Colorless to cloudy Liquid	2	-	-	X	X	2	2	X	2	X	2	-	X	2	-	-	-	-	-	-
Sodium Chromate	Yellow, translucent Crystals	1	-	-	-	1	2	2	1	2	1	X	-	2	2	-	-	-	-	-	-
Sodium Cyanide	In Water	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	X	X	-
Sodium Cyanide	White Crystaline Powder	1	1	-	1	1	1	1	1	1	1	1	1	1	1	2	1	1	X	X	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Sodium Dichromate	Red to red-orange Crystals	1	-	-	1	1	2	2	2	1	1	2	1	-	1	-	-	-	-	-	1
Sodium Ferricyanide	Ruby-red Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Sodium Ferrocyanide	Yellow, transparent Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Sodium Fluoride (70%)	White Liquid	1	1	1	2	-	2	2	-	2	-	-	-	-	1	-	-	2	-	-	-
Sodium Hydrate	White Solid	1	2	-	1	2	2	2	2	2	2	2	-	2	2	-	-	-	-	-	-
Sodium Hydrochlorite	Pale greenish Liquid	1	2	-	2	X	2	X	X	2	1	1	-	2	2	-	-	-	-	-	-
Sodium Hydrosulfide	Colorless needles	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Hydrosulfite	Lemon colored Powder or flake	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Sodium Hydroxide (10%)	Colorless Liquid	1	1	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Sodium Hydroxide (40%)	Colorless Liquid	1	1	1	2	2	1	1	1	2	1	1	1	X	-	2	1	1	X	X	-
Sodium Hydroxide (50% Under 212°F (100°C)	Colorless Liquid	1	1	2	2	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
Sodium Hydroxide (50%, Under 115°F (46°C)	Colorless Liquid	1	1	2	2	X	1	1	2	1	X	1	1	X	-	2	2	2	X	X	-
Sodium Hydroxide (50%, Under 180°F (82°C)	Colorless Liquid	1	1	2	2	X	X	X	2	2	X	2	1	X	-	X	2	2	X	X	-
Sodium Hydroxide (60%)	White Liquid	1	2	1	2	X	2	2	2	2	X	2	1	X	-	X	2	2	X	X	-
Sodium Hydroxide 25%	Colorless Liquid	1	1	1	2	2	1	1	1	2	1	1	X	-	-	X	X	2	X	X	-
Sodium Hypochlorite (20%)	White Liquid	1	2	1	1	X	X	X	X	-	X	1	1	2	1	X	X	2	X	X	-
Sodium Hypochlorite (5%)	White Liquid	1	2	1	1	X	X	X	-	-	1	1	1	1	1	X	X	2	X	X	-
Sodium Hyposulfate	Large, transparent Crystals	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Sodium Metallic	Silver Solid	2	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Metaphosphate	Colorless Crystals to white Powder	1	1	-	2	2	2	2	2	2	2	2	1	1	1	X	1	1	1	X	-
Sodium Nitrate	Colorless crystal	1	1	-	2	X	X	X	X	2	-	2	1	1	1	1	2	2	2	2	-
Sodium Perborate	White, amorphous Powder	1	1	-	2	X	X	X	X	2	-	X	-	2	-	X	1	1	1	X	-
Sodium Peroxide	Yellowish white Powder	1	1	2	-	-	-	-	1	1	1	1	2	X	1	X	1	1	1	X	-
Sodium Phosphate	Colorless Crystals to white Powder	1	1	-	2	-	2	2	X	2	-	-	1	1	1	-	1	1	X	X	-
Sodium Silicate	Lumps of greenish glass	1	1	-	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	1
Sodium Sulfate	White Crystals or Powder	1	1	-	1	1	2	2	1	1	1	1	1	1	1	-	-	-	-	-	1
Sodium Sulfate Decahydrate (Glauber's Salt)	Crystals or Powder	1	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Sulfhydrate	Colorless to cloudy Liquid	1	2	-	1	2	X	2	2	2	2	2	-	2	2	-	-	-	-	-	-
Sodium Sulfide	Yellow/Brick red flakes or Crystals	1	1	-	1	1	2	2	1	1	1	1	1	1	1	-	-	-	-	-	1
Sodium Sulfide Solution	Colorless to cloudy Liquid	1	2	-	1	2	-	2	2	1	2	2	-	X	-	-	-	-	-	-	1
Sodium Sulfite	White Crystals or Powder	1	1	-	2	2	2	2	2	2	-	2	1	1	1	1	1	1	-	-	-
Sodium Sulfite Solution	Colorless to cloudy Liquid	1	2	-	1	2	-	2	2	1	2	2	-	X	-	1	1	1	-	-	-
Sodium Sulphydrate	Colorless needles	1	2	-	1	2	-	-	2	1	2	2	-	2	2	-	-	-	-	-	-
Sodium Thiocyanate Solution	Colorless to cloudy Liquid	1	1	-	1	1	2	-	1	2	1	2	-	-	-	-	-	-	-	-	-
Sodium Thiosulfate (HPO)	White Powder	1	1	-	-	1	1	1	1	1	-	1	1	1	1	X	1	1	2	X	-
Sodium Tripolyphosphate (STPP)	White Powder	1	2	-	-	-	-	-	-	2	X	-	-	-	-	-	1	1	X	X	-
Solnus Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	1	1	1	1	1	1	-
Sour Crude Oil	Liquid	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
Soybean Oil	Pale yellow oil	1	1	1	X	2	X	X	2	2	1	2	-	1	2	1	1	1	-	-	-
Spent Acid	Liquid	1	2	2	X	X	X	X	X	X	1	2	X	X	X	-	1	1	-	-	-
Stannic Chloride	Colorless, fuming Liquid	1	1	-	-	2	2	2	X	X	1	X	1	X	2	X	-	-	-	X	-
Stannic Sulfide	Yellow to brown Powder	1	2	-	-	2	-	2	-	2	-	2	-	-	-	-	-	-	-	-	-
Stannous Chloride (Under 150°F)	White Mass	1	1	-	2	1	1	1	1	1	1	1	1	X	1	-	-	-	-	-	1
Starch	White amorphous Powder	1	1	-	1	2	1	1	2	-	1	1	-	1	1	-	-	-	-	-	-
Starch gum (Dextrin)	Yellow or White Powder	1	1	-	1	1	-	-	1	X	1	-	-	1	1	-	1	1	-	-	1
Stauffer Jet 1	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Stauffer Jet 2	Liquid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	-
Steam	Gas	USE STEAM HOSE ONLY														-	-	-	-	-	-
Stearic Acid (Octadecanoic Acid)	Colorless Waxy Solid	1	1	1	2	2	2	2	2	2	1	2	1	1	1	X	2	1	X	X	-
Stearin	Colorless crystal or Powder	1	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Stoddard Solvent	Clear petroleum distillate	1	2	-	X	2	X	X	-	X	1	-	1	1	2	2	1	1	-	1	-
STPP (Sodium Tripolyphosphate)	White Powder	1	2	-	2	-	2	2	-	2	X	-	-	-	-	-	2	1	X	X	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Straight Synthetic Oils	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
Styrene (Monomer)	Colorless Oily Liquid	1	2	-	X	X	X	X	-	X	2	-	2	2	-	2	X	2	X	2	-
Sucrose Solutions	Liquid	1	1	-	-	1	1	1	1	1	-	1	-	-	-	1	1	1	-	-	-
Sugar, Liquid, Blended	Liquid	1	1	-	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-
Sugar, Syrup	Liquid	1	1	-	1	1	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-
Sulfamic Acid	In Water	1	1	1	2	X	X	X	-	2	1	2	1	X	X	-	-	-	-	-	-
Sulfamic Acid 10% Under 170°F (77°C)	Colorless Liquid	1	X	-	-	-	X	X	-	-	2	2	1	-	-	-	-	-	-	-	-
Sulfate Liquors Under 150°F (66°C)	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1
Sulfur (Under 200°F (93°C)	Yellow Crystals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur Chloride	Yellow Oily Liquid	1	2	-	X	X	X	X	X	X	1	2	-	2	2	X	X	2	-	X	-
Sulfur Dioxide	Colorless Gas or Liquid	-	-	-	2	X	X	-	-	2	X	-	-	-	-	-	-	-	-	-	-
Sulfur Dioxide (Dry)	-	1	2	-	2	X	X	X	X	X	1	2	-	X	1	2	1	1	1	1	-
Sulfur Dioxide (Liquid)	Colorless Liquid	1	-	1	1	X	X	X	2	2	X	2	-	-	X	-	-	-	-	-	-
Sulfur Dioxide (Moist)	-	1	-	1	1	X	X	X	2	1	2	2	-	-	X	-	-	-	-	-	-
Sulfur Hexaflouride (Gas)	Colorless Gas	1	1	-	1	2	2	2	1	1	2	2	-	1	2	-	-	-	-	-	-
Sulfur Trioxide (Dry)	Solid	1	2	-	2	X	X	X	X	X	1	X	X	-	1	2	2	2	2	-	-
Sulfuric Acid (10%)	Colorless Water Solution	1	1	1	1	2	1	1	1	1	1	1	1	X	-	-	X	X	2	X	X
Sulfuric Acid (100%)	Colorless Liquid	1	X	X	X	X	X	X	X	X	2	X	X	-	-	2	X	2	X	X	-
Sulfuric Acid (30%)	Colorless Water Solution	1	1	1	1	2	2	2	1	1	1	1	1	X	-	X	X	2	X	X	-
Sulfuric Acid (50%)	Colorless Water Solution	1	1	1	1	X	X	X	2	1	1	1	1	X	-	X	X	2	X	X	-
Sulfuric Acid (60%) (48.5 deg Baume)	Colorless Liquid	1	1	1	1	X	X	X	X	1	1	1	1	X	-	X	X	2	X	X	-
Sulfuric Acid (75%)	Colorless to Brown Solution	1	1	1	2	X	X	X	X	2	1	2	2	X	-	X	X	2	X	X	-
Sulfuric Acid (88%) (64.7 deg Baume)	Colorless Liquid	1	2	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (93%)	Colorless to Brown Oily Liquid	1	X	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (96%)	Colorless Liquid	1	X	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid (98%)	Colorless to Brown Oily Liquid	1	X	1	X	X	X	X	X	X	1	X	X	X	-	X	X	2	X	X	-
Sulfuric Acid, Fuming (Oleum)	Colorless to Dark Brown Oily Liquid	1	X	X	X	X	X	X	X	X	1	X	X	X	X	-	-	1	-	-	X
Sulfurous Acid (10%)	Colorless Liquid	1	1	1	1	X	X	X	-	2	1	1	1	-	1	-	X	2	1	X	X
Sulfurous Acid (75%)	Colorless Liquid	1	1	1	1	X	X	X	X	X	1	1	1	X	-	X	X	2	X	X	-
Sun R&O Oils	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	1	-
Suntac HP Oils	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	-	-
Suntac WR Oils	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	-	1	1	-	-
Sunvis Oils 700, 800, 900	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	-	-	-
Synthetic Oil (Citgo)	Liquid	1	1	-	X	-	-	-	-	X	-	-	-	1	2	1	1	1	-	-	-
Syrup	Viscous Liquid	1	1	-	-	-	1	1	2	-	1	-	-	-	-	-	1	1	-	-	-
T																					
Tall Oil	Black liquid	1	2	-	X	1	X	X	X	X	2	X	-	-	X	-	X	2	-	-	-
Tall Oil(Under 150°F (66°C)	Liquid	1	1	-	X	2	X	X	2	X	1	X	-	-	-	-	X	2	-	-	-
Tallow	White to clear Solid or Liquid	1	1	-	2	2	-	-	2	2	-	-	-	1	2	2	2	2	1	2	-
Tannic Acid	Faint Yellow Powder	1	1	1	1	X	2	2	2	1	1	2	1	1	1	2	1	1	2	X	-
Tannic Acid (10 %)	Yellow Liquid	1	1	-	-	X	2	2	2	X	1	2	1	1	1	2	1	1	2	X	-
Tar (Bituminous) Under 100°F (38°C)	-	1	1	2	X	2	X	X	2	X	1	-	X	-	-	1	1	1	1	2	-
Tar Oil	Yellow to dark brown Liquid	1	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
Tartaric Acid	White Crystalline Powder	1	1	1	1	2	2	2	2	1	1	1	1	-	-	-	2	2	2	-	-
TEA (Triethanolamine)	Colorless Viscous Liquid	1	1	-	1	2	2	2	2	2	X	2	1	-	2	-	1	1	-	1	-
TEL (Tetraethyl Lead)	Colorless Oily Liquid	1	2	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-	-
Tellus Oils	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	1	1	-
Tenol Oils	Liquid	1	1	-	X	1	-	-	-	X	1	-	-	1	2	1	1	1	-	-	-
Tergitol (Ethoxylates and Ethoxysulfates of Alcohol)	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	2	-
Terpineol	Colorless Liquid or Crystal	1	1	-	-	-	X	X	-	X	-	2	1	2	2	-	-	-	-	-	-
Tertiary Butyl Alcohol	Colorless Liquid or Crystal	1	2	-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachlorobenzene	White Crystal	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-

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		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
Tetrachloroethane (Acetylene Tetrachloride)	Colorless Liquid	1	X	X	X	-	X	X	-	X	1	X	X	1	X	-	-	-	-	-	-
Tetrachloroethylene	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachloromethane	Colorless Liquid	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tetrachloronaphthalene	Oily Liquid to Crystaline Solid	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Tetradecanol	White Solid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetraethyl Lead (TEL)	Colorless Oily Liquid	1	2	-	X	2	X	X	X	X	1	X	-	2	1	-	-	-	-	-	-
Tetraethylene Glycol	Colorless Liquid	1	2	-	-	2	-	2	-	1	2	2	-	-	-	-	-	-	-	-	-
Tetrahydrofuran (THF)	Colorless Liquid	1	X	-	2	X	X	X	X	2	1	X	-	1	X	2	-	-	-	-	X
Tetrahydroxydicyclopentadiene (JP 10)[2]	-	-	-	-	X	X	X	X	X	X	1	X	-	1	X	-	-	-	-	-	-
Tetralin	Colorless Liquid	1	-	-	X	X	X	X	X	X	1	X	-	2	-	-	-	-	-	-	X
Theobromo Oil (Cocoa Butter)	Liquid above 95°F (35°C)	1	1	2	-	2	X	X	2	-	-	-	-	-	-	1	1	1	-	-	-
THF (Tetrahydrofuran)	Colorless Liquid	1	X	-	2	X	X	X	X	2	1	X	-	1	X	2	-	-	-	-	X
Thiopen	-	1	-	-	X	X	X	X	X	2	2	-	-	-	-	-	-	-	-	-	-
Tin Tetrachloride	Colorless Liquid	1	-	-	-	2	-	2	X	-	-	2	-	-	-	-	-	-	-	-	-
Titanium Tetrachloride	Colorless Liquid	1	-	-	X	X	-	-	X	X	2	-	-	-	-	1	2	2	X	X	-
Toluene (Toluol) (Methyl Benzene)	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	-
Toluene Diisocyanate (Hylene)	Yellow Liquid	1	-	-	2	X	X	X	X	2	X	X	-	-	-	-	-	-	-	-	-
Toluene Diisocyanate (Isocyanate)	Water White to Yellow Liquid	1	2	-	X	X	X	X	X	X	1	-	-	-	-	1	1	1	-	-	-
Toluidine	Yellow Liquid or White Crystal	1	-	-	-	X	-	X	-	X	2	X	-	-	-	-	-	-	-	-	-
Toluol (Toluene)	Colorless Liquid	1	2	2	X	X	X	X	X	X	1	X	X	1	X	1	1	1	1	1	-
Transformer Oil (Askarel Types)1	Liquid	1	2	2	X	X	X	X	X	X	1	X	1	1	X	1	1	1	-	1	2
Transformer Oil (Petroleum Type)1	Liquid	1	1	-	X	1	X	X	2	X	1	X	1	1	2	1	1	1	1	1	-
Transmission Fluid (Type A)	Liquid	1	1	-	X	1	X	X	2	X	1	-	1	2	-	1	1	1	-	1	-
Tributoxyethyl Phosphate	Yellow Liquid	1	1	X	2	X	X	X	-	2	-	X	X	2	-	1	-	-	X	-	-
Tributyl Phosphate	Colorless Liquid	1	1	X	X	X	X	X	X	X	1	X	2	-	-	1	-	-	X	-	-
Tricalcium Aluminate (Calcium Aluminate)	Crystals or Powder	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene	White Crystal or colorless Liquid	1	2	-	-	X	X	X	X	X	2	X	-	-	-	-	-	-	-	-	-
Trichloroethane 1,1,1 (Methyl Chloroform)	Colorless Liquid	1	X	-	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Trichloroethylene	Colorless Liquid	1	1	X	X	X	X	X	X	X	1	X	2	2	-	X	-	1	X	1	-
Trichloropropane	Colorless Liquid	1	-	-	-	2	-	X	2	X	1	X	-	-	-	-	-	-	-	-	-
Tricresyl Phosphate	Colorless Liquid	1	-	X	1	X	X	X	X	2	1	X	1	1	-	1	-	2	X	-	-
Triethanolamine (TEA)	Colorless Viscous Liquid	1	1	-	1	2	2	2	2	2	X	2	1	-	2	-	1	1	-	1	-
Triethylamine	Colorless Liquid	1	-	-	2	2	X	X	-	X	2	-	-	-	-	-	-	-	-	-	-
Triethylene Glycol	Colorless Liquid	1	-	-	-	2	-	2	-	2	2	2	-	-	-	-	-	-	-	-	-
Trihydroxybenzoic Acid (Gallic Acid)	In Alcohol or Glycerol	1	1	1	1	X	2	2	X	2	1	-	1	X	X	X	1	1	-	-	1
Trimethyl Phosphite	Colorless Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene (Mesitylene)	Liquid	1	-	-	X	X	X	X	X	X	1	-	-	1	X	-	-	-	-	-	-
Trinitrophenol (Picric Acid)	Yellow Crystals	1	2	2	2	2	2	2	2	2	1	2	-	X	1	X	1	1	X	X	1
Trioctyl Phosphate	Liquid	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenyl Phosphate	Colorless Powder	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tripolyphosphate (STPP), (Sodium)	White Powder	1	2	-	2	-	2	2	-	2	X	-	-	-	-	-	2	1	X	X	-
Trisodium Phosphate (TSP)	Colorless crystal	1	-	-	1	2	2	X	2	2	1	X	-	-	-	-	-	-	-	-	-
Tung Oil	Yellow drying oil	1	2	-	X	2	X	X	X	X	1	2	-	-	2	1	1	1	1	1	-
Turpentine	Liquid oil	1	X	1	X	2	X	X	X	X	1	X	2	1	1	-	1	1	1	2	-
U																					
Ucon Hydrolube Types 150CP, 200CP	Liquid	1	1	-	1	1	-	-	-	1	-	-	-	1	2	1	1	1	1	1	-
Ucon Hydrolube Types 275CP, 300CP, 550CP	Liquid	1	-	-	-	1	X	X	-	X	1	-	-	2	2	-	-	-	-	-	-
Ucon M1	Liquid	1	1	-	1	1	-	-	-	1	-	-	-	1	2	1	1	1	1	1	-
Undecanol (Undecyl Alcohol)	Colorless Liquid	1	-	-	-	1	-	2	-	-	2	2	-	-	-	-	-	-	-	-	-
Undecyl Alcohol (Undecanol)	Colorless Liquid	1	-	-	-	1	-	2	-	-	2	2	-	-	-	-	-	-	-	-	-
Union Hydraulic Tractor Fluid	Brown Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	1	1	-

CHEMICAL RESISTANCE TABLE

1 = Preferred - Constant Contact
2 = Acceptable - Intermittent Contact
X = Not Recommended
- = No Data

NOTE: RATINGS ARE FOR THE AFFECT ON THE POLYMER ONLY!

CHEMICAL	FORM (AT ROOM TEMPERATURE UNLESS OTHERWISE STATED)	GATES HOSE / POLYMERS														COUPLINGS / ADAPTERS					
		TEFLON	XLPE	UHMWPE	EPDM	NBR	SBR	NR	CR	BUTYL	FLUOROCARBON	HYPALON	CPE	NYLON	PVC	IRON/CARBON STEEL	STAINLESS STEEL 304	STAINLESS STEEL 316	ALUMINUM	BRASS	POLYPRO
V																					
Varnish	-	1	2	-	X	X	X	X	X	X	2	X	-	1	-	2	1	1	-	2	-
Vegetable Oils	Liquids	1	-	1	2	-	X	X	2	X	-	1	1	1	2	1	1	1	1	-	-
Versilube F-50, F-44	Liquid	1	-	-	2	2	2	2	2	2	1	2	-	1	2	1	1	1	1	1	-
Vinegar	Brownish to colorless Liquid	1	1	-	-	2	2	2	2	2	1	X	2	-	1	X	2	1	X	X	-
Vinyl Acetate	Colorless Liquid	1	1	X	X	X	X	X	X	2	X	X	1	-	-	-	1	2	1	2	-
Vinyl Chloride (Monomer)	-	1	2	-	X	X	X	X	X	X	2	X	X	-	X	2	1	1	1	X	-
Vinyl Fluoride	Colorless Gas	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Vinyl Trichloride (Trichloroethane)	Colorless Liquid	1	-	-	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Vitrea Oils	Liquid	1	1	-	X	1	-	-	-	X	-	-	-	1	2	1	1	1	-	-	-
VM&P Naptha (Mineral Spirits)	Colorless Liquid	1	1	-	X	1	X	X	-	X	1	X	-	1	-	1	1	1	2	1	-
W																					
Waste Paint	Liquid to semi-Solid paste	1	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
Water	Liquid	1	1	1	1	1	1	1	1	-	1	1	1	1	1	2	1	1	1	1	-
Water (Brine)	Liquid	1	1	-	1	2	1	1	2	1	1	1	-	1	1	-	-	-	-	-	1
Water (Deionized)	Liquid	1	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Water (Distilled)	Liquid	1	1	1	1	1	1	1	2	1	-	1	-	1	1	-	-	-	-	-	1
Water (Potable)	Liquid	USE AQUARIUS HOSE ONLY									1					-	-	-	-	-	1
Water Glycols	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Water in Oil Emulsions	Liquid	1	1	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
White & Bagley No. 2190 Cutting Oil	Liquid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wines	Liquid	1	2	-	X	X	X	X	X	X	1	X	1	1	-	2	2	2	1	-	-
Wood Oil	Liquid	1	1	-	X	1	X	X	2	X	1	2	1	1	1	-	-	-	-	-	-
X																					
Xylene (Dimethylbenzene)	Colorless Liquid	1	2	X	X	X	X	X	X	X	1	X	X	X	X	-	-	-	-	-	-
Xylenol (Dimethylphenol)	White solid, liquid @ 68°F (20°C)	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Z																					
Zeric	-	1	1	-	X	1	-	-	-	X	-	-	-	2	2	-	-	-	-	-	-
Zinc Acetate	White Crystal	1	1	-	2	X	2	2	X	2	X	X	-	X	1	1	1	1	1	1	-
Zinc Chloride Solutions	Colorless to cloudy Liquid	1	1	-	-	1	2	2	1	2	1	1	1	1	2	X	2	1	X	X	-
Zinc Chromate	Yellow Solid	1	1	-	-	-	-	-	-	-	-	1	1	-	-	-	1	1	-	-	-
Zinc Hydrate	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Zinc Oxide	White or gray Powder	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Zinc Sulfate Solutions	Colorless to cloudy Liquid	1	1	-	2	2	X	X	2	2	-	2	1	2	2	X	2	1	X	X	-

NOTES

NOTES

LEGAL

The specifications listed are based on Gates experience. However, our specifications and data do NOT cover all possible belts drive conditions. It is the responsability of the belt drive system designer to ensure Gates belts are appropriate for a given system and application. The provided data is representative of our in-house experience and does not necessarily match product performance in industrial use. Gates cannot assume any liability concerning the suitability and process ability of our products. We also cannot assume liability for process results, damage or consequential damages associated with the use of our products.

Do ot use Gates belts in applications that depend solely upon the belt to raise/lower, support or sustain a mass without an independent safety backup system. Gates products are not suitable for applications in aircraft.

ALL INFORMATION CONTAINED ARE SUBJECT TO CHANGE WITH OUT NOTICE.


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