

# Quality Industrial Rubber Goods Since 1921



**Potomac** RUBBER COMPANY, INC.

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**Potomac**

**TECHNICAL  
INFORMATION**



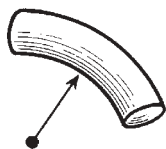
## Hose Bend Radius Definition

## BEND RADIUS CONSIDERATIONS

**DEFINITIONS:**

**Bend Radius**—The radius of a bent section of hose measured to the innermost surface of the curved portion.

**Minimum Bend Radius**—The maximum amount a hose can be bent prior to putting excessive forces on the hose to the point of causing kinking or damage.



BEND RADIUS

The formula shows how to determine the minimum length of hose to make the angle of bend required. Remember that the bend should take place over the entire minimum length and not just a portion of it.

### GENERAL FORMULA

$$\frac{\text{Angle of Bend}}{360^\circ} \times 2 \quad r = \text{Minimum length of hose to make bend}$$

$r$  = Given bend radius of hose

**Example:** To make a 90° bend with Style B Water Suction & Discharge 2" I.D.

Given  $r = 4.5$  inches

$$\frac{90^\circ}{360^\circ} \times 2 \times 3.14 \times 4.5$$

$.25 \times 2 \times 3.14 \times 4.5 = 7"$  minimum  
length of hose to  
make bend  
without damage  
to hose

**NOTE:** This formula does not mean 7" will be long enough to meet application need. It only means that if the 90° bend takes place in less than 7", the hose could possibly be damaged.

### HOSE DELIVERY CHART

### Hose Delivery Chart

INSIDE DIAMETER OF HOSE	GALLONS DELIVERED PER MIN.	HOURS NECESSARY TO WATER AN AVERAGE SIZE LAWN
3/8"	4	11
1/2"	10-1/2	5
5/8"	17	3
3/4"	31	2
1"	57	1

**Proof that it pays to use a larger inside diameter garden hose.**

FIGURES BASED ON PUTTING ON INCH  
OF WATER ON 5000 SQ.FT. OF LAWN  
USING LOW PRESSURE SPRINKLER.  
HIGH BACK PRESSURE MECHANICAL  
SPRINKLER WOULD RAISE WATERING  
TIME PROPORTIONALLY

## OPEN-END DISCHARGE

THE TERM "OPEN -END DISCHARGE" REFERS TO A HOSE WHICH EMPTIES A FLUID INTO THE ATMOSPHERE. EVEN THOUGH ONE END IS OPEN, THE PRESSURE IS NOT LOW THROUGHOUT THE HOSE.

THE INLET END PRESSURE IS EQUAL TO THAT IN THE LINE TO WHICH THE HOSE IS CONNECTED UNLESS

THE FLOW RATE IS SO LOW THAT THE HOSE IS NOT COMPLETELY FILLED. THE PRESSURE ALONG THE HOSE LENGTH DROPS FROM A

MAXIMUM AT THE INLET TO ZERO AT THE OUTLET AND THE PRESSURE AT ANY GIVEN POINT ALONG THE LENGTH IS NEARLY

PROPORTIONAL TO THE DISTANCE FROM THE HOSE INLET.

THE FOLLOWING TABLE SHOWS THE FLOW IN GALLONS PER MINUTE FOR VARIOUS SIZE HOSES IN OPEN-END DISCHARGE SERVICE.

**OPEN-END FLOW GPM**

	Pressure At Inlet psi	HOSE LENGTH, FEET									Pressure At Inlet psi	HOSE LENGTH, FEET							
		25	50	75	100	125	150	200	300			25	50	75	100	125	150	200	300
½" Hose	30	10.4	6.2	5.6	4.8	4.3	3.8	3.3	2.6	1" Hose	30	68.0	46.2	37.5	32.0	28.5	25.8	22.0	17.8
	40	12.1	8.5	6.2	5.6	5.0	4.5	3.8	3.2		40	79.0	54.4	44.0	37.5	33.0	30.0	25.8	20.0
	50	13.8	9.4	7.5	6.4	5.6	5.1	4.0	3.5		50	89.0	62.0	49.0	42.0	37.5	34.0	29.0	23.3
	60	15.2	10.4	8.5	7.1	6.2	5.6	4.9	3.8		60	100.0	68.0	54.4	46.2	41.8	37.5	32.0	25.8
	70	16.6	11.2	9.0	7.8	6.8	6.2	5.3	4.2		70	74.0	59.0	51.0	45.0	40.8	40.8	37.3	28.0
	80	18.0	12.1	9.8	8.5	7.3	6.6	5.6	4.5		80	79.0	63.0	54.4	48.0	43.0	43.0	37.5	30.3
	90	19.0	13.0	10.4	8.8	7.7	7.1	6.0	4.8		90	84.0	68.0	58.0	51.8	46.2	46.0	40.0	32.0
	100	20.1	13.8	11.0	9.4	8.5	7.5	6.4	4.9		100	89.0	71.0	62.0	54.4	49.0	49.0	42.0	34.0
	125	22.8	15.5	12.5	10.5	9.4	8.5	7.2	5.8		125	101.0	80.0	68.0	62.0	55.8	47.8	38.0	
¾" Hose	30	18.1	12.5	10.3	8.7	7.7	7.0	6.0	4.9	1½" Hose	50	110.0	85.0	72.0	65.0	58.0	50.0	42.0	
	40	21.4	14.8	12.5	10.3	9.0	8.3	7.0	5.7		75	130.0	110.0	90.0	80.0	73.0	64.0	52.0	
	50	23.9	16.5	13.2	11.4	10.3	9.2	7.9	6.3		100	150.0	125.0	110.0	92.0	85.0	73.0	58.0	
	60	26.5	18.1	14.8	12.5	11.2	10.3	8.7	7.0	2" Hose	150	150.0	150.0	130.0	120.0	110.0	90.0	67.0	
	70	27.5	20.0	16.0	13.7	12.0	11.0	10.0	7.6		50	140.0	115.0	96.0	85.0	75.0	65.0	54.0	
	80	30.6	21.4	16.8	14.8	13.0	11.8	10.3	8.3		75	170.0	140.0	125.0	110.0	96.0	84.0	67.0	
	90	32.5	22.5	18.1	15.5	14.0	12.5	10.5	8.7	100	205.0	160.0	140.0	125.0	110.0	96.0	75.0		
	100	34.5	23.9	19.0	16.6	14.8	13.2	11.4	9.2	150	205.0	205.0	170.0	155.0	140.0	125.0	97.0		
	125	39.0	27.0	21.5	18.5	16.6	15.0	12.9	10.5	1½" Hose	50	180.0	150.0	130.0	120.0	105.0	90.0	74.0	
30	31.0	21.3	17.2	14.8	13.0	11.8	10.2	8.2	75		230.0	180.0	160.0	145.0	130.0	120.0	90.0		
40	36.0	25.0	20.0	17.2	15.2	13.8	11.8	9.4	100		260.0	220.0	180.0	170.0	150.0	130.0	105.0		
50	41.7	28.0	22.5	19.2	17.2	15.2	13.2	10.7	150		260.0	260.0	230.0	205.0	180.0	160.0	130.0		
60	45.5	31.0	25.0	21.3	19.0	17.2	14.8	11.8	2" Hose		50	380.0	310.0	270.0	240.0	210.0	180.0	150.0	
70	49.5	34.0	27.2	23.5	21.0	18.8	17.1	12.8		75	480.0	380.0	330.0	290.0	270.0	230.0	180.0		
80	53.0	36.0	29.1	25.0	22.0	20.0	17.2	13.8		100	550.0	450.0	380.0	350.0	310.0	260.0	215.0		
90	56.2	39.0	31.0	27.0	23.8	21.3	18.2	14.8		125		550.0	480.0	425.0	380.0	330.0	265.0		
100	60.0	41.0	33.0	28.0	25.0	22.6	19.2	15.5											
125	68.0	46.0	37.5	32.0	28.0	25.8	21.8	17.5											

## Pressure-Temperature Equivalents of Saturated Steam Gauge Pressure at Sea Level

Lbs. Per Sq. In.	°F.	Temperature °C.	Lbs. Per Sq. In.	°F.	Temperature °C.
0	212.0	100.0	110	344.1	173.4
5	227.1	108.4	115	347.2	175.1
10	239.4	115.2	120	350.1	176.7
15	249.8	121.0	125	352.9	178.3
20	258.8	126.0	130	355.6	179.8
22	261.2	127.8	135	358.3	181.3
24	265.3	129.6	140	360.9	182.7
26	268.3	131.3	145	363.4	184.1
28	271.2	132.9	150	365.9	185.5
30	274.1	134.5	155	368.2	186.8
32	276.8	136.0	160	370.6	188.1
34	279.3	137.4	165	373.9	189.4
36	281.8	138.8	170	375.3	190.7
38	284.4	140.2	175	377.4	191.9
40	286.7	141.5	180	379.6	193.1
42	289.0	142.8	185	381.7	194.3
44	291.2	144.0	190	383.7	195.4
46	293.5	145.3	195	385.9	196.6
48	295.5	146.4	200	387.9	197.7
50	297.7	147.6	205	398.8	198.8
52	299.9	148.7	210	391.6	199.8
54	301.6	149.8	215	392.9	200.5
56	303.6	150.9	220	395.4	201.7
58	308.4	151.9	225	397.2	202.9
60	307.4	153.0	230	399.0	203.9
62	309.2	154.0	235	400.7	204.8
64	310.8	154.9	240	402.5	205.8
66	312.6	155.9	245	404.2	206.8
68	314.2	156.8	250	406.1	207.8
70	316.0	157.0	255	407.7	208.7
72	317.7	158.7	260	409.4	209.7
74	319.3	159.6	265	411.0	210.6
76	320.9	160.5	270	412.6	211.4
78	322.3	161.3	275	414.2	212.3
80	323.8	162.1	280	415.7	213.2
85	327.6	164.2	300	421.0	216.1
90	331.2	166.2	350	436.5	224.7
95	334.6	168.1			
100	337.8	169.9			
105	341.1	171.7			

## STEEL PIPE AND WROUGHT IRON PIPE SIZES MEASURED BY INSIDE DIAMETER TO AND INCLUDING 12 INCHES OVER 12 BY OUTSIDE DIAMETER

STANDARD PIPE					EXTRA HEAVY PIPE			
Nominal Inside Diameter	Actual Inside Diameter	Approximate Inside Diameter (Inches)	Actual Outside Diameter	Approximate Outside Diameter (Inches)	Actual Inside Diameter	Approximate Inside Diameter (Inches)	Actual Outside Diameter	Approximate Outside Diameter (Inches)
1/8"	0.27	17/64	0.405	13/32	0.21	7/32	0.405	13/32
1/4"	0.36	23/64	0.54	35/64	0.29	19/64	0.54	35/64
3/8"	0.49	31/64	0.675	43/64	0.42	27/64	0.675	43/64
1/2"	0.62	5/8	0.84	27/32	0.54	35/64	0.840	27/32
3/4"	0.82	53/64	1.05	1 3/64	0.74	47/64	1.050	1 3/64
1"	1.05	1 3/64	1.315	1 5/16	0.95	61/64	1.315	1 5/16
1 1/4"	1.38	1 3/8	1.66	1 21/32	1.27	1 17/64	1.660	1 21/32
1 1/2"	1.61	1 39/64	1.90	1 29/32	1.49	1 31/64	1.90	1 29/32
2"	2.07	2 5/64	2.375	2 3/8	1.93	1 15/16	2.375	2 3/8
2 1/2"	2.47	2 15/32	2.875	2 7/8	2.32	2 21/64	2.875	2 7/8
3"	3.07	3 5/64	3.50	3 1/2	2.89	2 57/64	3.50	3 1/2
3 1/2"	3.55	3 35/64	4.00	4	3.36	3 23/64	4.00	4
4"	4.03	4 1/32	4.50	4 1/2	3.82	3 53/64	4.50	4 1/2
4 1/2"	4.51	4 33/64	5.00	5	4.28	4 9/32	5.00	5
5"	5.05	5 3/64	5.563	5 9/16	4.81	4 13/16	5.563	5 9/16
6"	6.07	6 5/64	6.625	6 5/8	5.75	5 3/4	6.625	6 5/8
7"	7.02	7 1/64	7.625	7 5/8	6.63	6 5/8	7.625	7 5/8
8"	8.07	8 5/64	8.625	8 5/8	7.63	7 5/8	8.625	8 5/8
9"	8.94	8 15/16	9.625	9 5/8	8.63	8 5/8	9.625	9 5/8
10"	10.19	10 3/16	10.75	10 3/4	9.75	9 3/4	10.75	10 3/4
11"	11.00	11	11.75	11 3/4	10.75	10 3/4	11.75	11 3/4
12"	12.09	12 3/32	12.75	12 3/4	11.75	11 3/4	12.75	12 3/4
14" O.D.	13.25	13 1/4	14.00	14	13.00	13	14.00	14
15" O.D.	14.25	14 1/4	15.00	15	14.00	14	15.00	15
16" O.D.	15.25	15 1/4	16.00	16	15.00	15	16.00	16

## Water Discharge Flow of Water Through 100 Foot Lengths Hose, Straight-Smooth Bore U.S. Gallons Per Minute

Pressure PSI Inlet	Discharge in U.S. Gallons Per Minute—Nominal Hose Diameters										
	½"	¾"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	6"
30	5	9	15	30	60	90	200	350	580	1250	3630
40	6	11	16	35	65	110	240	425	675	1450	4270
50	7	12	20	40	73	120	265	475	750	1620	4790
60	8	14	22	45	80	130	290	525	850	1800	5250
75	9	16	24	50	90	150	330	580	950	2000	6030
100	10	17	29	60	105	180	385	680	1100	2300	7000
125	12	20	32	65	120	200	430	760	1200	2600	7770
150	13	22	34	70	135	215	460	850	1300	2900	8610

Figures are to be used as a guide since the hose inside diameter tolerance, the type of fitting used, orifice restriction all influence the actual discharge. Thus, variations plus or minus from the table may be obtained in actual service.

## Friction Loss in Water Hose Pounds Per Square Inch Per 100 Foot Length Straight-Smooth Bore

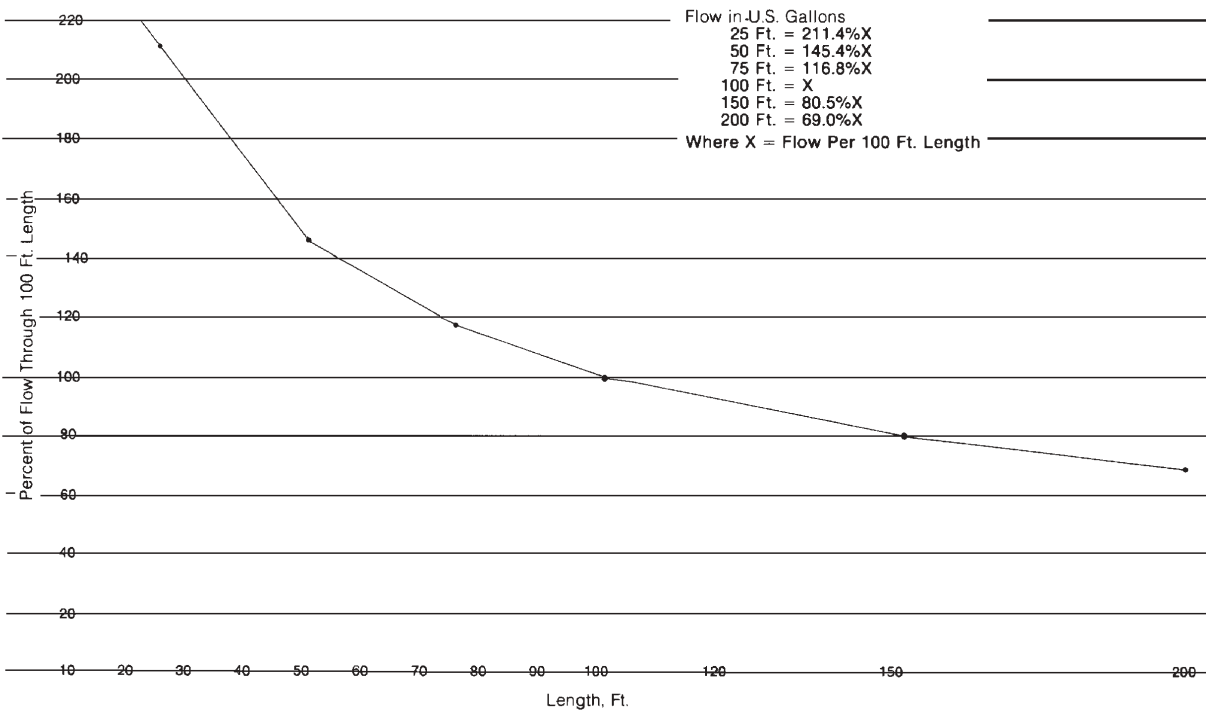
Flow of Water in U.S. Gal. Per Min.	Actual Internal Diameter, Inches												
	½	¾	¾	1	1¼	1½	2	2½	3	4	5	6	8
0.5	0.4												
1.5	3.02	1.01	0.42										
2.5	7.75	2.58	1.08										
5	27.8	9.27	3.86	0.95	0.32	0.13							
10	99.5	33.2	13.8	3.38	1.14	0.47	0.12						
15		71.0	29.6	7.25	2.45	1.01	0.25	0.08					
20		121.0	50.3	12.4	4.15	1.71	0.42	0.14					
25			76.5	18.7	6.34	2.60	0.64	0.22					
30			108.0	26.5	8.96	3.68	0.90	0.30	0.13				
35			142.0	34.8	11.8	4.83	1.18	0.40	0.17				
40				44.7	15.1	6.20	1.52	0.51	0.21				
45				55.0	18.6	7.65	1.87	0.63	0.26				
50				67.5	22.8	9.35	2.28	0.78	0.32				
60				94.3	31.8	13.1	3.19	1.08	0.45				
70				126.0	42.5	17.5	4.25	1.44	0.60				
80					54.6	22.5	5.48	1.86	0.77				
90					67.5	27.8	6.80	2.30	0.95	0.23			
100					81.5	33.5	8.19	2.78	1.15	0.28			
125					124.0	50.6	12.4	4.20	1.73	0.43			
150						72.1	17.6	5.97	2.46	0.60	0.20		
175						94.5	23.1	7.83	3.23	0.79	0.27		
200						122.0	29.6	10.1	4.15	1.02	0.34		
225							36.8	12.5	5.15	1.26	0.43		
250							44.6	15.2	6.28	1.53	0.52		
275							53.3	18.1	7.45	1.83	0.62		
300							62.5	21.2	8.75	2.19	0.73	0.30	
325							72.5	24.6	10.2	2.48	0.84	0.35	
350							83.2	28.2	11.7	2.86	0.97	0.40	
375							94.5	32.1	13.3	3.24	1.10	0.45	
400						107.0	36.2	14.9	3.66	3.66	1.23	0.51	
450							44.9	18.6	4.55	4.55	1.53	0.64	
500							54.5	22.5	5.53	5.53	2.00	0.77	0.19
600							76.5	31.6	7.74	7.74	2.61	1.08	0.27
700							102.0	42.1	10.3	10.3	3.47	1.49	0.35
800							131.0	53.9	13.2	13.2	4.45	1.89	0.45
900								66.8	16.4	16.4	5.83	2.29	0.56
1000								81.4	19.9	19.9	6.72	2.78	0.69
1100								97.0	23.8	23.8	8.01	3.32	0.72
1200								114.0	27.9	27.9	9.43	3.90	0.96
1300								132.0	32.4	32.4	10.9	4.52	1.11
1400									37.2	37.2	12.5	5.18	1.28
1500									42.1	42.1	14.2	5.89	1.45
1600									47.5	47.5	16.1	6.63	1.63
1800									59.0	59.0	19.9	8.26	2.03
2000									71.9	71.9	24.2	10.02	2.47

To convert from pounds per sq. inch pressure to feet of hydraulic head multiply pounds per sq. inch by 2.309.  
To convert from U.S. gallons per min. to cubic feet per min. multiply U.S. gallons per min. by 0.1337.

$$\text{Based On } p = \frac{0.483Q^{1.85}}{d^{4.87}}$$

Where p = pressure loss in lbs. per sq. inch  
Q = quantity in U.S. Gallons per minute  
d = diameter of hose in inches

## Conversion Factor Flow of Water Through Lengths Other Than 100 Feet Straight-Smooth Bore



## pressure conversion

Feet of water to pounds per sq. inch.

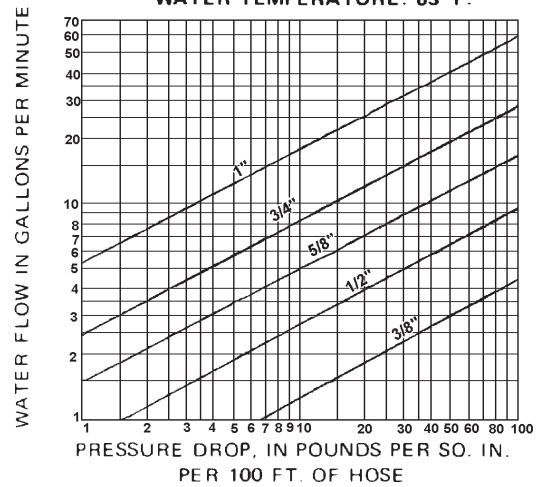
(Based on formula Pressure (psi) = Pressure Head [Ft. of Water] x 0.433)

Pressure Head (Ft. of Water)	Pressure (psi)	Pressure Head (Ft. of Water)	Pressure (psi)	Pressure Head (Ft. of Water)	Pressure (psi)
0	0	200	87	410	177
5	2.2	210	91	420	182
10	4.3	220	95	430	186
20	8.7	230	100	440	190
30	13.0	240	104	450	195
40	17	250	108	460	199
50	22	260	113	470	203
60	26	270	117	480	208
70	30	280	121	490	212
80	35	290	126	500	216
90	39	300	130	550	238
100	43	310	134	600	260
110	48	320	139	650	281
120	52	330	143	700	303
130	56	340	147	750	325
140	61	350	151	800	346
150	65	360	156	850	368
160	69	370	160	900	390
170	74	380	164	950	411
180	78	390	169	1000	433
190	82	400	173		

Feet of water to inches of mercury.

Feet of Water	In. Hg.	Feet of Water	In. Hg.
1	0.9	18	15.9
2	1.8	20	17.7
4	3.5	22	19.4
6	5.3	24	21.2
8	7.1	26	23.0
10	8.8	28	24.8
12	10.6	30	26.5
14	12.4	32	28.3
16	14.1	34	30.0

## WATER FLOW THROUGH HOSE (SMOOTH BORE) (INCLUDING GARDEN HOSE) HOSE SIZES: 3/8" to 1" I.D. WATER TEMPERATURE: 63° F.



**INDUSTRIAL  
RUBBER  
PRODUCTS**



**SINCE 1921**

## Friction Loss of Pressure in Air Hose (Pulsating Pressure Flow)

I.D. of Hose	Gauge Pressure	40	50	60	Cubic Feet Air Per Minute Through 100 Ft. Hose Lines						130	140	150	
					70	80	90	100	110	120				
Loss of Pressure in Lbs. Per Sq. Inch														
½" Hose (Coupled)	50	20.2	36.2											
	60	16.8	29.6	46.8										
	70	14.0	24.8	40.0	56.8									
	80	12.0	21.6	34.8	50.4	69.2								
	90	10.8	19.0	29.6	44.0	61.0	82.0							
	100	9.6	16.8	26.6	38.6	54.4	73.3							
	110	8.6	15.2	24.0	35.2	49.2	66.6	89.0						
¾" Hose (Coupled)	50	3.0	4.8	7.0	8.8	13.0	17.0	22.8	28.4					
	60	2.4	3.8	5.6	7.6	10.4	13.6	17.2	22.4	28.2				
	70	1.8	3.0	4.6	6.4	8.4	11.0	14.0	17.6	22.0				
	80	1.6	2.6	3.8	5.6	7.2	9.4	11.6	14.4	17.6	21.2			
	90	1.4	2.2	3.2	4.6	6.2	8.0	10.0	12.4	15.0	18.0	21.6		
	100	1.2	2.0	2.8	4.0	5.4	7.0	8.8	10.8	13.2	15.8	18.8	22.2	
	110	1.0	1.8	2.6	3.6	4.8	6.2	7.8	9.8	11.8	14.2	16.8	19.8	
1" Hose (Coupled)	50	.6	1.0	1.6	2.2	3.0	4.0	5.2	7.0	9.6	14.0			
	60	.6	.8	1.2	1.6	2.4	3.0	4.0	5.2	6.6	8.2	11.0	14.4	
	70	.4	.8	1.0	1.4	2.0	2.6	3.2	4.0	5.0	6.2	7.6	9.4	
	80	.4	.6	1.0	1.4	1.6	2.2	2.8	3.4	4.0	4.8	5.4	7.0	
	90	.4	.6	.8	1.2	1.4	1.8	2.4	2.8	3.4	4.0	4.8	5.6	
	100	.4	.4	.8	1.0	1.2	1.6	2.0	2.4	3.0	3.6	4.2	4.8	
	110	.4	.4	.6	.8	1.2	1.4	1.8	2.2	2.6	3.0	3.6	4.2	
1¼" Hose (Coupled)	50		.4	.4	.6	.8	1.0	1.4	2.0					
	60		.2	.4	.6	.6	1.0	1.2	1.6	2.0	2.4	3.0		
	70			.4	.4	.6	.8	.8	1.2	1.4	1.6	2.0	2.6	
	80			.2	.4	.4	.6	.8	1.0	1.2	1.4	1.6	2.0	
	90				.4	.4	.6	.6	.8	1.0	1.2	1.4	1.6	
	100				.2	.4	.4	.6	.8	.8	1.0	1.2	1.4	
	110				.2	.4	.4	.6	.6	.8	1.0	1.0	1.2	
1½" Hose (Coupled)	50					.4	.4	.4	.6	.8	.8	1.0	1.2	
	60					.2	.4	.4	.4	.6	.6	.8	1.0	
	70						.2	.4	.4	.6	.6	.6	.8	
	80							.2	.4	.4	.4	.6	.8	
	90								.2	.4	.4	.4	.6	
	100									.4	.4	.4	.4	
	110									.4	.4	.4	.4	

## FRACTIONAL, DECIMAL AND METRIC CROSS-REFERENCE

### ENGLISH TO METRIC CONVERSIONS

1/16 Inch	.0625 Inch	1.5 MM
1/8 "	.125 "	3.1 MM
3/16 "	.1875 "	4.7 MM
1/4 "	.25 "	6.3 MM
5/16 "	.3125 "	7.9 MM
3/8 "	.375 "	9.5 MM
7/16 "	.4375 "	11.1 MM
1/2 "	.5 "	12.7 MM
9/16 "	.5625 "	14.2 MM
5/8 "	.625 "	15.8 MM
11/16 "	.6875 "	17.4 MM
3/4 "	.75 "	19.0 MM
13/16 "	.8125 "	20.6 MM
7/8 "	.875 "	22.2 MM
15/16 "	.9375 "	23.8 MM
1 "	1.0 "	25.4 MM

### METRIC TO ENGLISH CONVERSIONS

1 MM	.039 Inch Approximately	5/128 Inch
2 MM	.078 "	5/64 "
3 MM	.118 "	1/8 "
4 MM	.157 "	5/32 "
5 MM	.197 "	3/16 "
6 MM	.236 "	15/64 "
7 MM	.276 "	9/32 "
8 MM	.315 "	5/16 "
9 MM	.354 "	23/64 "
10 MM	.394 "	25/64 "

### APPROXIMATE CONVERSION FACTORS

TO CONVERT ENGLISH TO METRIC:  
DIVIDE DECIMAL INCHES BY .039

TO CONVERT METRIC TO ENGLISH:  
MULTIPLY METRIC BY .039

## METRIC EQUIVALENTS

### LINEAL MEASUREMENT UNITS CENTIMETER, METER AND KILOMETER EQUIVALENTS OF INCHES, FEET AND MILES

Feet	Inches	Centimeters	Meters	Feet	Miles	Meters	Kilometer
1/2	1	2.54	0.0254	25	—	7.62	—
1	12	30.48	0.3048	50	—	15.24	—
2	—	60.96	0.6096	75	—	22.86	—
3	36	91.44	0.9144	100	—	30.48	—
3.28	39.36	100.00	1.0000	125	—	38.10	—
4	—	121.92	1.1292	150	—	45.72	—
5	—	152.40	1.5240	300	—	91.44	—
6	—	182.88	1.8288	500	—	152.40	0.15240
7	—	213.36	2.1336	1000	—	304.80	0.30480
8	—	243.84	2.4384	3280.84	0.6214	1000.00	1.00000
9	—	274.32	2.7432	5280	1.0000	1609.35	1.60935
10	—	304.80	3.0480	—	—	—	—

1 Foot = 30.480 Centimeters

1 Meter = 3.28083 Feet

1 Mile = 1609.35 Meters

1 Kilometer = .62137 Miles

### LINEAL MEASUREMENT UNITS MILLIMETER AND CENTIMETER EQUIVALENTS OF INCHES

Fractional Inches	Decimal Inches	Millimeters	Centimeters	Inches	Millimeters	Centimeters
1/8"	0.12500	3.175	0.318	6"	152.4	15.24
3/16"	0.18750	4.763	0.476	7"	177.8	17.78
1/4"	0.25000	6.350	0.635	8"	203.2	20.32
5/16"	0.31250	7.938	0.794	10"	254.0	25.40
3/8"	0.37500	9.525	0.953	12"	304.8	30.48
1/2"	0.50000	12.700	1.270	14"	355.6	35.56
5/8"	0.62500	15.875	1.588	16"	406.4	40.64
3/4"	0.75000	19.050	1.905	18"	457.2	45.72
1"	1.00000	25.400	2.540	20"	508.0	50.80
1-1/8"	1.12500	28.575	2.858	24"	609.6	60.96
1-1/4"	1.25000	31.750	3.175	30"	762.0	76.20
1-3/4"	1.37500	34.925	3.493	36"	914.4	91.44
1-1/2"	1.50000	38.100	3.810	42"	1066.8	106.68
2"	2.00000	50.80	5.08	48"	1219.2	121.92
2-1/2"	2.50000	63.50	6.35	54"	1371.6	137.16
3"	3.00000	76.20	7.62	60"	1524.0	152.40
3-1/2"	3.50000	88.90	8.89	66"	1676.4	167.64
4"	4.00000	101.60	10.16	72"	1828.8	182.88
4-1/2"	4.50000	114.30	11.43			
5"	5.00000	127.00	12.70			

1 Inch = 25.40 Millimeters

1 Millimeter = .03937 Inches



## Coupling Thread Compatibility

Industrial Hose Couplings have threads which are usually one of the various "pipe" threads. All pipe threads are commonly referred to by the generic name of Iron Pipe Thread or IPT. There are several different types of IPT threads and you must know specifically what they are to insure compatibility with mating threads.

### IPT Thread Compatibility Chart

Description	Seal	Thread (Female)	Compatible Threads (Male)
American Standard Tapered Pipe Thread	Thread Seal (with Sealing Compound)	NPT	NPT NPTF
American Standard Tapered Dryseal Pipe Thread	Thread Seal (Dryseal)	NPTF	NPTF NPT—(with Sealer)
American Standard Straight Pipe Thread for mechanical joints (Includes 2 female types, depending on sealing method, and one male type compatible with both females)	Washer or Mechanical Ground Joint	NPSM	NPSM NPT NPTF
American Standard Straight Pipe Threads for hose couplings and nipples	Washer	NPSH	NPSH NPT NPTF

## Table of Standard Threads

The following tables show the outside diameter of male part, and number of threads per inch of the various standards of hose threads

SIZE	BASIC O.D. MALE PART	THREADS PER INCH	SIZE	BASIC O.D. MALE PART	THREADS PER INCH
<b>NATIONAL STANDARD THREAD (U.S. Form Thread)</b>					
3/4"	1.375	8	3"	3.6239	6
1"	1.375	8	3-1/2"	4.2439	6
1-1/2"	1.9900	9	4-1/2"	5.7659	4
2-1/2"	3.0686	7-1/2	—	—	—
<b>STRAIGHT IRON PIPE THREAD — Standard for Hose Couplings</b>					
1/4"	.534	18	1-1/2"	1.8788	11-1/2
3/8"	.671	18	2"	2.3528	11-1/2
1/2"	.8248	14	2-1/2"	2.855	8
3/4"	1.0353	14	3"	3.470	8
1"	1.2951	11-1/2	3-1/2"	3.970	8
1-1/4"	1.6399	11-1/2	4"	4.470	8
<b>REGULAR GARDEN HOSE THREAD</b>					
1/2"	1.0625	11-1/2	3/4"	1.0625	11-1/2
5/8"	1.0625	11-1/2	—	—	—

**A "CAPITAL" NAME IN RUBBER**

## TABLE OF DECIMAL AND METRIC EQUIVALENTS

64ths	32nds	16ths	8ths	Decimal	MM
$\frac{1}{64}$	$\frac{1}{32}$	$\frac{1}{16}$		0.01562	0.397
				0.03125	0.794
$\frac{3}{64}$				0.04688	1.191
				0.06250	1.588
$\frac{5}{64}$	$\frac{3}{32}$		$\frac{1}{8}$	0.07812	1.984
				0.09375	2.381
$\frac{7}{64}$				0.10938	2.778
				0.12500	3.175
$\frac{9}{64}$	$\frac{5}{32}$	$\frac{3}{16}$		0.14062	3.572
				0.15625	3.968
$\frac{11}{64}$				0.17188	4.366
				0.18750	4.763
$\frac{13}{64}$	$\frac{7}{32}$		$\frac{1}{4}$	0.20312	5.159
				0.21875	5.556
$\frac{15}{64}$				0.23438	5.953
				0.25000	6.350
$\frac{17}{64}$	$\frac{9}{32}$	$\frac{5}{16}$		0.26562	6.747
				0.28125	7.144
$\frac{19}{64}$				0.29688	7.541
				0.32150	7.938
$\frac{21}{64}$	$\frac{11}{32}$		$\frac{3}{8}$	0.32812	8.334
				0.34375	8.731
$\frac{23}{64}$				0.35938	9.128
				0.37500	9.525
$\frac{25}{64}$	$\frac{13}{32}$	$\frac{7}{16}$		0.39062	9.922
				0.40625	10.319
$\frac{27}{64}$				0.41288	10.716
				0.43750	11.113
$\frac{29}{64}$	$\frac{15}{32}$		$\frac{1}{2}$	0.45312	11.509
				0.46875	11.906
$\frac{31}{64}$				0.48438	12.303
				0.50000	12.700

64ths	32nds	16ths	8ths	Decimal	MM
$\frac{33}{64}$	$\frac{17}{32}$	$\frac{9}{16}$		0.51562	13.097
				0.53125	13.494
$\frac{35}{64}$				0.54688	13.891
				0.56250	14.288
$\frac{37}{64}$	$\frac{19}{32}$		$\frac{5}{8}$	0.57812	14.684
				0.59375	15.081
$\frac{39}{64}$				0.60938	14.478
				0.62500	15.875
$\frac{41}{64}$	$\frac{21}{32}$	$\frac{11}{16}$		0.64062	16.272
				0.65625	16.669
$\frac{43}{64}$				0.67188	17.066
				0.68750	17.463
$\frac{45}{64}$	$\frac{23}{32}$		$\frac{3}{4}$	0.70312	17.859
				0.71875	18.256
$\frac{47}{64}$				0.73438	18.653
				0.75000	19.050
$\frac{49}{64}$	$\frac{25}{32}$	$\frac{13}{16}$		0.76562	19.447
				0.78125	19.844
$\frac{51}{64}$				0.79688	20.241
				0.81250	20.638
$\frac{53}{64}$	$\frac{27}{32}$		$\frac{7}{8}$	0.82812	21.034
				0.84375	21.431
$\frac{55}{64}$				0.85938	21.823
				0.87500	22.225
$\frac{57}{64}$	$\frac{29}{32}$	$\frac{15}{16}$		0.89062	22.622
				0.90625	23.019
$\frac{59}{64}$				0.92188	23.416
				0.93750	23.813
$\frac{61}{64}$	$\frac{31}{32}$		1	0.95312	24.209
				0.96875	24.606
$\frac{63}{64}$				0.98438	25.003
				1.0000	25.400

CAN'T FIND IT? CALL US

## DECIMAL EQUIVALENT CHART

	$\frac{1}{64}$	.015625
$\frac{1}{32}$	$\frac{2}{64}$	.03125
	$\frac{3}{64}$	.046875
$\frac{1}{16}$	$\frac{4}{64}$	.0625
	$\frac{5}{64}$	.078125
$\frac{3}{32}$	$\frac{6}{64}$	.09375
	$\frac{7}{64}$	.109375
$\frac{1}{8}$	$\frac{8}{64}$	.125
	$\frac{9}{64}$	.140625
$\frac{5}{32}$	$\frac{10}{64}$	.15625
	$\frac{11}{64}$	.171875
$\frac{3}{16}$	$\frac{12}{64}$	.1875
	$\frac{13}{64}$	.203125
$\frac{7}{32}$	$\frac{14}{64}$	.21875
	$\frac{15}{64}$	.234375
$\frac{1}{4}$	$\frac{16}{64}$	.25
	$\frac{17}{64}$	.265625
$\frac{9}{32}$	$\frac{18}{64}$	.28125
	$\frac{19}{64}$	.296875
$\frac{5}{16}$	$\frac{20}{64}$	.3125
	$\frac{21}{64}$	.328125
$\frac{11}{32}$	$\frac{22}{64}$	.34375
	$\frac{23}{64}$	.359375
$\frac{3}{8}$	$\frac{24}{64}$	.375
	$\frac{25}{64}$	.390625
$\frac{13}{32}$	$\frac{26}{64}$	.40625
	$\frac{27}{64}$	.421875
$\frac{7}{16}$	$\frac{28}{64}$	.4375
	$\frac{29}{64}$	.453125
$\frac{15}{32}$	$\frac{30}{64}$	.46875
	$\frac{31}{64}$	.484375
$\frac{1}{2}$	$\frac{32}{64}$	.5

	$\frac{33}{64}$	.515625
$\frac{17}{32}$	$\frac{34}{64}$	.53125
	$\frac{35}{64}$	.546875
$\frac{9}{16}$	$\frac{36}{64}$	.5625
	$\frac{37}{64}$	.578125
$\frac{19}{32}$	$\frac{38}{64}$	.59375
	$\frac{39}{64}$	.609375
$\frac{5}{8}$	$\frac{40}{64}$	.625
	$\frac{41}{64}$	.640625
$\frac{21}{32}$	$\frac{42}{64}$	.65625
	$\frac{43}{64}$	.671875
$\frac{11}{16}$	$\frac{44}{64}$	.6875
	$\frac{45}{64}$	.703125
$\frac{23}{32}$	$\frac{46}{64}$	.71875
	$\frac{47}{64}$	.734375
$\frac{3}{4}$	$\frac{48}{64}$	.75
	$\frac{49}{64}$	.765625
$\frac{25}{32}$	$\frac{50}{64}$	.78125
	$\frac{51}{64}$	.796875
$\frac{13}{16}$	$\frac{52}{64}$	.8125
	$\frac{53}{64}$	.828125
$\frac{27}{32}$	$\frac{54}{64}$	.84375
	$\frac{55}{64}$	.859375
$\frac{7}{8}$	$\frac{56}{64}$	.875
	$\frac{57}{64}$	.890625
$\frac{29}{32}$	$\frac{58}{64}$	.90625
	$\frac{59}{64}$	.921875
$\frac{15}{16}$	$\frac{60}{64}$	.9375
	$\frac{61}{64}$	.953125
$\frac{31}{32}$	$\frac{62}{64}$	.96875
	$\frac{63}{64}$	.984375
$1$	$\frac{64}{64}$	1.



# CHEMICAL SPECIFICATIONS

## Chemical Resistance Tables

The ratings shown in the following Chemical Resistance Tables are based upon data obtained from published literature, polymer suppliers, rubber manufacturers, field experience and specific laboratory testing.

The tables are intended to serve only as a guide in the selection of an elastomer type for service in the chemicals and fluids listed. We cannot guarantee the accuracy nor assume the responsibility for the use thereof.

Data is based upon room temperature conditions unless specifically noted otherwise. Increases in concentrations of chemicals, increases in temperature or a combination of both can have a detrimental effect on the chemical resistance characteristics of an elastomer type.

The data shown does not imply conformance to meeting the requirements of State or Federal Regulations when handling food products.

### Chemical Resistance Rating Guide:

- A** - Little or No Effect
- B** - Slight to Moderate Effect
- C** - Conditional—May be suitable for limited or intermittent service
- - Insufficient or No Data Available
- X** - Not Recommended for use

### Elastomer Types:

- NR**—Natural Rubber, Isoprene
- SBR**—Styrene butadiene Rubber, GRS
- FPM**—Fluoroelastomer, Viton
- NBR**—Acrylonitrile-butadiene, Nitrile
- CR**—Chloroprene, Neoprene
- EPDM**—Ethylene-propylene-diene terpolymer
- CSM**—Chlorosulfonated Polyethylene, Hypalon
- XLPE**—Cross-linked Polyethylene

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR-II	CR	EPDM	CSM	XLPE
Absolute Alcohol	A	A	B	A	A	A	A	—	A
Acetal	—	—	—	—	—	—	—	—	A
Acetaldehyde	C	X	X	X	X	C	A	C	A
Acetamide	X	X	B	A	A	B	A	B	—
Acetate of Lime	B	—	X	B	B	B	A	A	A
Acetate Solvents	C	C	X	X	X	X	B	X	X
Acetic Acid - 5%	B	B	A	B	B	A	A	A	A
Acetic Acid - 10%	B	B	B	B	B	A	A	A	A
Acetic Acid - 20%	B	B	C	B	B	A	A	A	A
Acetic Acid - 30%	B	B	C	B	B	A	A	A	A
Acetic Acid - 50%	C	C	C	C	C	C	A	B	A
Acetic Acid - Glacial	C	C	X	C	C	X	B	C	A
Acetic Acid - Hot Hi Press	X	X	X	X	X	X	B	C	A
Acetic Aldehyde	C	—	X	X	X	C	A	C	A
Acetic Anhydride	B	B	X	X	X	B	A	A	A
Acetic Ester	X	X	X	X	X	X	B	X	B
Acetic Ether	X	X	—	X	X	X	B	X	B
Acetic Oxide	C	—	X	C	C	B	B	A	B
Acetidin	X	X	X	X	X	X	B	—	B
Acetoacetic Acid	B	—	—	X	X	X	—	—	—
Acetoacetic Ester	B	B	—	X	X	X	B	—	—
Acetone	—	—	X	X	X	B	A	B	A
Acetone Cyanhydrin	C	—	X	X	X	B	X	C	—
Acetonic	B	—	X	X	X	B	A	B	—
Acetonitrile	B	—	X	C	C	A	A	B	—
Acetophenone	X	X	X	X	X	X	A	X	A
Acetyl Acetic Acid	B	—	X	X	X	X	—	—	—
Acetyl Acetone	C	—	X	X	X	X	A	X	—
Acetyl Acetonic	C	—	X	X	X	X	A	X	—
Acetyl Benzene	C	—	X	X	X	X	A	X	A
Acetyl Chloride	X	X	A	X	X	X	—	X	—
Acetylene	B	B	A	B	B	B	A	B	A
Acetylene Dichloride	X	X	A	X	X	X	—	X	—
Acetylene Tetra Bromide	X	X	A	X	X	C	A	—	—
Acetylene Tetrachloride	X	X	A	X	X	X	X	X	—
Acetyl Oxide	C	—	X	C	C	X	—	B	—
Acetyl Propane	X	—	X	X	X	X	B	X	—
Acrolein	B	—	A	B	B	—	—	B	—
Acrylic Aldehyde	B	—	X	B	B	—	—	B	—
Acrylonitrile	C	—	X	X	X	B	X	C	A
Adipic Acid	A	—	—	A	A	X	—	—	—
Aero Lubriplate	X	X	A	A	A	X	—	A	—
Aero Safe 2300	X	X	X	X	X	X	A	X	—
Aero Safe 2300W	X	X	X	X	X	X	A	X	—
Aero Shell IAC	X	X	A	A	A	B	X	A	—
Aero Shell 7A Grease	X	X	A	A	A	B	X	A	—
Aero Shell 17	X	X	A	A	A	B	X	A	—
Aero Shell 750	X	X	A	B	B	X	X	X	—
Aerozene 50	X	X	X	B	B	B	—	B	—
Agar-Agar	A	—	—	B	B	B	—	—	—
Agricultural Lime	A	—	A	A	A	A	A	B	—
Agricultural Spray Oil	—	—	—	—	—	—	—	—	A
Air (Below 300°F)	X	X	A	B	B	B	B	B	A
Air (Above 300°F)	X	X	A	X	X	X	X	X	A
Air	A	A	A	A	A	A	A	A	A
Air Slaked Lime	A	—	—	A	A	A	—	—	—
Alcohol - Absolute	A	A	B	A	A	A	A	A	A
Alcohol - Aliphatic	A	A	A	A	A	A	A	A	A
Alcohol - Aromatic	C	—	A	C	A	C	C	X	X
Alcohol - Denatured	A	A	A	A	A	A	B	A	A
Alcohol - Ethyl	A	A	B	A	A	A	A	A	—
Alcohol - Grain	A	A	C	A	A	A	A	B	—
Alcohol - Methyl	X	—	A	C	C	C	A	B	—
Alcohol - Ether	A	—	A	C	C	C	A	B	—
Alcohol of Vinegar	A	B	A	C	C	B	A	B	—
Aldehyde	C	—	X	B	X	C	A	C	A
Alcyclic Hydrocarbon	X	X	A	B	B	X	X	X	—
Aliphatic Hydrocarbon	X	X	A	C	C	X	—	B	—
Aliphatic Naptha	X	X	B	X	X	X	X	X	—
Alkazene	X	X	B	X	X	X	X	X	—
Altomaleic Acid	B	—	A	C	C	B	—	B	—
Allyl Alcohol	A	—	B	A	A	—	—	A	—
Allyl Aldehyde	B	—	A	B	B	—	—	B	—
Allyl Bromide	X	X	B	X	X	X	X	X	X
Allyl Chloride	X	X	B	X	X	X	X	X	A

	NR	SBR	FPM	NBR	NBR-II	CR	EPDM	CSM	XLPE
Allyl Phenyl Methyl Ether	X	X	B	X	X	X	X	X	X
Almond Oil, Artificial	X	X	—	X	X	X	X	X	X
Alpha Chloropropylene	X	X	X	X	X	X	X	X	X
Alpha Chlorotoluene	X	X	X	X	X	X	X	X	X
Alpha Hydroxypropionic Acid	A	—	—	B	B	B	—	—	—
Alpha Hydroxytoluene	X	X	X	X	X	X	X	X	X
Alum	A	A	A	A	A	A	A	A	A
Alum (NH3Cr-K)	A	A	X	A	A	A	A	A	A
Aluminum Acetate	A	B	X	B	B	B	—	B	—
Aluminum Acetate Solution	A	—	X	B	B	B	—	B	—
Aluminum Ammonium Sulfate	A	—	—	B	B	B	—	—	—
Aluminum Bromide	A	A	A	A	A	A	A	A	A
Aluminum Chloride	A	A	A	A	A	A	A	A	A
Aluminum Chloride - 150°F	A	A	A	A	A	A	A	A	A
Aluminum Fluoride	B	A	A	A	A	A	A	A	A
Aluminum Fluoride - 150°F	B	A	A	A	A	A	A	A	A
Aluminum Formate	X	—	—	X	X	X	X	X	X
Aluminum Hydroxide	A	—	C	B	B	B	A	B	A
Aluminum Nitrate	A	A	A	A	A	A	A	A	A
Aluminum Phosphate	A	A	A	A	A	A	A	A	A
Aluminum Potassium Sulfate	A	A	A	A	A	A	A	A	A
Aluminum Sodium Sulfate	A	A	A	A	A	A	A	A	A
Aluminum Sulfate	A	B	A	A	A	A	A	A	A
Ambrex 33 Mobil	X	X	A	A	A	B	X	C	X
American Ashes	A	A	A	A	A	A	A	A	A
Amines, Mixed	B	B	X	X	X	B	B	X	—
Aminobenzene	X	X	X	X	X	X	X	X	A
Aminodimethylbenzene	X	X	X	X	X	X	X	X	X
Aminoethanol	B	C	C	B	B	B	—	B	—
Aminoethylenaniline	B	B	—	B	B	B	—	B	—
Aminohexane	C	—	X	C	C	—	—	C	—
Aminopentane	X	—	X	C	C	—	—	C	—
Aminoxylene	C	X	C	X	X	X	—	X	—
Ammonia Alum	A	A	—	B	B	—	—	X	—
Ammonia-Anhydrous (Liquid)	X	X	X	B	B	—	—	X	A
Ammonia Cupric Sulfate	C	—	A	A	A	—	—	A	—
Ammonia Gas (Cold)	A	A	—	A	A	—	—	A	—
Ammonia Gas (Hot)	C	—	X	—	A	B	A	B	A
Ammonia in Water	A	B	C	B	B	A	A	B	A
Ammoniak	A	A	A	A	A	A	A	A	A
Ammoniated Citric Acid	A	B	—	B	B	B	—	—	—
Ammoniated Latex	C	—	A	B	B	A	B	C	—
Ammonium Acetate	A	B	—	—	—	—	—	—	—
Ammonium Alum	A	B	—	B	B	—	—	—	—
Ammonium Bicarbonate	A	A	A	A	A	A	A	A	A
Ammonium Bitfluoride - 10%	—	—	—	B	B	—	—	—	—
Ammonium Carbonate	A	A	A	X	X	—	—	B	—
Ammonium Chloride	A	A	A	A	A	A	A	A	—
Ammonium Chromic Sulfate	A	A	—	A	A	A	A	A	—
Ammonium Dichromate	A	A	—	A	A	A	A	A	A
Ammonium Diphosphate	A	A	A	A	A	A	A	A	A
Ammonium Fluoride	B	—	—	B	B	—	—	—	—
Ammonium Fluoride Acid	X	X	X	B	B	X	X	X	X
Ammonium Hydrate - 38%	A	B	X	X	X	A	A	—	—
Ammonium Hydroxide	X	X	B	X	X	A	A	A	A
Ammonium Hydroxide - Conc.	X	X	B	X	X	A	A	A	A
Ammonium Hyposulfite	A	A	A	A	A	A	A	A	A
Ammonium Metaphosphate	A	A	A	A	A	A	A	A	A
Ammonium Muriate	A	A	A	A	A	A	A	A	A
Ammonium Nitrate	C	C	A	A	A	A	A	A	A
Ammonium Nitrite	A	A	—	A	A	A	A	A	A
Ammonium Persulfate	A	X	X	X	X	A	B	A	A
Ammonium Phosphate Dibasic	A	A	A	A	A	A	A	A	A
Ammon. Phos., Monobasic	A	A	A	A	A	A	A	A	A
Ammon. Phos., Tribasic	A	A	—	A	A	A	A	A	A
Ammonium Phosphate	B	A	—	A	A	A	A	A	A
Ammonium Rhodanate	A	A	—	A	A	A	A	A	A
Ammonium Salts	A	A	C	A	A	A	A	A	A
Ammonium Sulfate	A	B	A	A	A	A	A	A	A
Ammonium Sulfide	A	B	A	A	A	A	A	A	A
Ammonium Sulfite	A	A	A	A	A	—	—	A	A
Ammonium Thiocyanate	A	A	A	A	A	A	A	A	A
Ammonium Thiosulfate	A	A	A	A	A	A	A	A	A
Amoil	X	X	X	X	X	X	X	X	A
Amyl Acetate	C	C	X	X	X	X	X	X	A

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Amyl Acetic Ester	C	X	X	X	X	X	B	C	A
Amyl Acetone	X	X	X	X	X	X	X	X	—
Amyl Acid Phosphate	X	X	X	X	X	X	X	X	X
Amyl Alcohol	B	B	B	B	B	A	A	A	A
Amyl Amine	C	X	X	C	C	X	X	C	X
Amyl Borate	X	X	A	A	A	A	X	A	X
Amyl Bromide	X	X	A	X	X	X	X	X	X
Amyl Carbinol	B	—	B	A	A	B	C	A	—
Amyl Chloride	X	X	A	X	X	X	X	X	A
Amyl Chloronaphthalene	X	X	X	B	B	X	X	C	X
Amyl Ether	X	X	X	C	C	X	X	C	—
Amyl Hydrate	A	—	—	B	B	B	—	B	—
Amyl Hydride	X	X	A	A	A	B	X	B	—
Amyl Iodide	X	X	X	X	X	X	X	X	X
Amyl Naphthalene	X	X	A	X	X	X	X	X	—
Amyl Oleate	X	X	X	B	B	X	X	X	X
Amyl Phenol	X	X	A	X	X	X	X	X	A
Amyl Phthalate	X	X	C	X	X	X	X	X	X
Amylene	X	X	A	B	B	A	X	—	—
Anderol L774 (Diester)	X	X	A	B	A	X	X	X	X
Anderol L826 (Diester)	X	X	A	B	A	X	X	X	X
Anderol L829 (Diester)	X	X	A	B	A	X	X	X	X
Anethole (Anethol)	X	X	B	X	X	X	X	X	X
Ang-25 (Glycerol ester)	B	B	A	B	B	B	A	B	A
Ang-25 (TG749) (Diester base)	X	X	A	B	B	X	X	X	X
Anhydrous-Ammonia	X	X	X	B	B	A	A	X	A
Anhydrous Hydrazine	X	—	X	X	X	B	B	B	—
Anhydrous Hydrogen Fluoride	X	X	X	X	X	X	A	X	A
Aniline, Aniline Oils	X	X	A	X	X	C	B	C	—
Aniline	X	X	C	X	X	C	B	C	A
Aniline Chloride	B	—	B	C	C	X	B	X	A
Aniline Dyes	B	B	C	B	C	B	A	B	A
Aniline Hydrochloride	B	—	B	B	C	X	B	X	—
Aniline Salts	B	—	B	C	C	X	B	X	—
Animal Fats	X	X	A	A	A	B	C	B	—
Animal Gelatin	A	A	A	A	A	A	A	A	A
Animal Glue	B	C	A	A	A	A	B	A	—
Animal Glycerin	X	X	A	A	A	—	B	C	—
Animal Grease	X	X	A	A	A	B	C	B	—
Animal Oils	X	X	A	A	A	B	X	C	—
Anise Camphar	X	X	B	X	X	X	X	X	—
AN-0-3 Grade M	X	X	A	A	A	B	X	B	—
AN-0-6	X	X	A	A	A	B	X	B	—
AN-0-366	X	X	A	A	A	B	X	B	—
AN-VV-0-3666	X	X	A	A	A	B	X	B	—
Ansul Ether	X	X	X	C	B	X	C	X	—
Ant Oil	X	X	X	X	X	C	A	B	A
Antichlor	A	A	A	A	A	A	A	A	A
Antimonic Chloride	X	X	—	X	X	X	X	X	A
Antimonous Chloride	—	—	A	B	B	—	A	—	A
Antimony Chlorides	—	—	A	B	B	—	A	—	A
Antimony Pentachloride	X	X	—	X	X	X	X	X	A
Antimony Trichloride	—	—	A	B	B	—	A	—	A
Apple Acid	A	B	A	B	B	C	X	B	—
Aqua Ammonia	A	B	C	B	B	B	—	B	—
Aqua Regia	X	X	B	X	X	X	C	B	A
Arachidonic Acid	X	X	—	B	B	X	—	—	—
Argon	X	X	A	C	C	X	X	—	—
Arochlor	X	X	A	C	C	X	C	X	—
Arochlor 1243	X	X	A	C	C	X	B	X	—
Arochlor 1254	X	X	A	X	X	X	B	X	—
Arochlor 1260	X	X	A	A	A	X	—	A	—
Aromatic Hydrocarbons	X	X	A	C	C	X	X	X	X
Aromatic Fuel 50%	X	X	A	B	A	X	X	X	—
Aromatic Spirits	X	X	A	C	B	—	—	X	—
Aromatic Tar	X	X	A	C	B	—	—	X	—
Aromatic Vinegar	X	X	A	C	C	—	—	B	—
Aro-Tox Spray	—	—	—	C	C	—	—	—	—
Arguads	A	B	A	A	A	—	—	A	—
Arsenic Acid	B	A	A	A	A	A	A	A	—
Arsenic Butter	X	X	X	C	C	A	X	X	—
Arsenic Chloride	X	X	X	C	C	A	X	X	—
Arsenic Trichloride	X	X	X	B	B	A	X	X	—
Artificial Vinegar	B	—	A	B	B	C	X	B	—
Askarel	X	X	A	B	B	X	X	X	—
Asphalt, Hot	X	X	A	C	C	X	X	X	X
ASTM Ref Fuel A	X	X	A	A	A	X	X	X	—
ASTM Ref Fuel B	X	X	A	A	A	C	X	X	—
ASTM Ref Fuel C	X	X	A	B	A	C	X	X	—
ASTM Oil #1	X	X	A	A	A	C	B	X	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
ASTM Oil #2	X	X	A	A	A	B	X	—	—
ASTM Oil #3	X	X	A	A	A	B	X	—	—
ASTM Oil #4	X	X	A	A	A	B	X	—	—
Astral Oil	X	X	A	A	A	B	X	—	—
ATL-857	X	X	A	A	A	B	X	—	—
Atlantic Dominion F	X	X	A	A	A	B	X	X	—
Aurex 903R Mobil	B	X	A	A	A	B	X	X	—
Automatic Transmission Fluid	X	X	A	A	A	B	X	X	—
Automatic Brake Fluid	—	X	A	C	C	B	X	B	—
Aviation Gasoline	X	X	A	A	A	C	X	X	—
Azole's	C	—	C	X	X	X	C	—	—
Baking Soda	A	A	A	X	X	A	A	A	—
Banana Oil	X	X	X	X	X	B	X	C	—
Bardol B	X	X	X	X	B	X	X	X	X
Barium Carbonate	A	A	A	A	A	A	X	A	A
Barium Chloride	A	A	A	A	A	A	A	A	A
Barium Hydrate	A	A	A	A	A	A	A	A	A
Barium Hydroxide	A	A	A	A	A	A	A	A	A
Barium Monohydrate	A	A	—	A	A	—	—	—	—
Barium Monosulfide	A	A	A	A	A	A	A	A	A
Barium Octahydrate	A	A	—	A	A	A	—	—	—
Barium Sulfate	A	A	A	A	A	A	—	—	—
Barium Sulfide	A	B	A	A	A	A	A	A	A
Basic Iron Sulfate	A	A	—	A	A	A	—	—	—
Bayol D	X	X	A	A	A	B	X	X	—
Beer	A	A	A	A	A	A	A	A	A
Beet Sugar Liquors	A	A	A	A	A	A	A	A	A
Belt Oil	—	—	—	A	A	A	—	—	—
Bengal Gelatin	A	—	B	B	B	—	—	—	—
Benzaldehyde	X	X	X	X	X	X	B	—	A
Benzene	X	X	A	C	C	X	X	X	A
Benzene Carbanal	X	X	X	X	X	X	B	X	A
Benzene Carboxylic Acid	B	—	B	X	X	X	B	X	A
Benzene Methylal	X	X	X	X	X	X	A	X	A
Benzene Sulfonic Acid	X	X	A	C	C	X	C	X	—
Benzidam	X	X	A	X	X	C	B	C	—
Benzin	X	X	A	A	A	B	X	X	—
Benzine	X	X	A	A	A	B	X	X	—
Benzine Petroleum Ether	X	X	X	X	X	X	X	X	A
Benzine Petroleum Naptha	X	X	X	X	X	X	X	X	A
Benzine Solvent	X	X	A	A	A	B	X	X	—
Benzochloride	X	X	A	X	X	X	X	X	A
Benzoic Acid	C	X	A	X	X	C	X	X	—
Benzoic Aldehyde	X	X	X	X	X	X	B	X	A
Benzol	X	X	X	C	C	X	X	X	A
Benzol Hydride	X	X	X	X	X	X	B	X	A
Benzoline	X	X	A	X	X	X	X	X	—
Benzophenol	X	X	X	X	X	X	X	X	X
Benzophenone	X	X	—	—	—	X	B	—	X
Benzotrighloride	X	X	X	X	X	X	X	X	X
Benzoyl Chloride	X	X	B	X	X	X	X	X	X
Benzoyl Acetate	X	X	X	X	X	X	X	B	X
Benzyl Alcohol	X	X	A	X	X	B	X	B	—
Benzyl Benzoate	X	X	X	X	X	X	X	X	—
Benzyl Chloride	X	X	A	X	X	X	X	X	—
Betula Oil	X	X	B	X	X	X	C	—	—
Biborate of Soda	A	A	A	A	A	A	A	A	—
Bicarbonate of Soda	B	A	A	A	A	A	A	A	—
Bichloride of Mercury	—	—	—	—	—	—	—	—	—
Bichromate of Soda	—	—	—	—	—	—	—	—	—
Biphenyl	X	X	X	X	X	X	X	X	X
Biphenyl Oxides	X	X	C	X	X	X	X	X	X
Biphenyl Phthalate	—	—	C	—	—	—	—	—	—
Birch Oil	X	X	B	X	X	X	C	X	X
Bismuth Carbonate	A	A	A	A	A	A	A	A	A
Bismuth Subcarbonate	A	A	A	A	A	A	A	A	A
Bismuthyl Carbonate	A	A	A	A	A	A	A	A	A
Black Ash	A	A	A	A	A	A	A	A	A
Black Liquor	B	—	A	B	B	A	A	A	A
Black Liquor-Waste	X	X	A	A	A	A	X	C	—
Black Point 77	C	C	A	A	A	C	B	—	—
Black Sulfate Liquor	B	C	A	B	B	A	A	A	A
Blanc Fixe, Synthetic	A	A	A	A	A	A	A	A	A
Blast Furnace Gas	X	X	X	X	X	X	X	X	X
Bleach Liquor	—	—	A	—	—	—	—	—	—
Bleach Solutions	X	X	A	X	X	C	A	A	A
Bleaching Powder	C	X	A	C	C	X	B	A	A
Blown Linseed Oil	X	X	A	A	A	X	B	A	—
Blue Copperas	C	X	A	A	A	X	B	A	A
Blue Jack	C	C	A	A	A	X	B	A	A



## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Blue Salts	A	A	A	A	A	A	A	A	A
Blue Stone	C	—	A	A	A	A	A	A	A
Blue Vitrol	C	—	A	A	A	A	A	A	A
Boghead Naptha	X	X	A	A	A	C	X	—	—
Boiled Linseed Oil	X	X	A	A	A	B	B	C	—
Boletic Acid	B	C	—	X	X	—	—	—	—
Bone Oil	—	—	A	A	A	—	—	X	—
Bone Tar	—	—	A	A	A	—	—	X	—
Boracic Acid	A	A	A	A	A	A	A	A	A
Borax	B	B	A	B	B	A	A	A	A
Borax Decahydrate	A	—	A	A	A	A	A	A	A
Bordeaux Mixture	A	A	A	A	A	A	A	A	A
Boric Acid	A	A	A	A	A	A	A	A	A
Boran Fluids (HEF)	X	X	A	B	B	X	X	X	—
Brake Fluids—Non-petroleum	—	A	X	C	C	B	A	B	—
Brandol	C	—	A	C	C	C	B	A	—
Brandy	A	A	B	A	A	A	A	A	A
Bray GG-130	X	X	A	B	A	X	X	X	—
Brayco 719-R (VV-H-910)	B	—	X	C	C	B	A	B	—
Brayco 885 (MIL-L-6085A)	—	X	A	C	B	X	X	X	—
Brayco 910	A	B	X	B	B	B	A	A	A
Bret 710	A	B	X	A	B	A	A	A	A
Brine	A	A	A	A	A	A	A	A	A
Brom-113	—	—	—	C	C	—	—	—	—
Brom-114	X	X	B	C	B	B	X	B	—
Bromallylene	X	X	B	X	X	X	X	X	—
Bromine—Gas	X	X	B	X	X	X	X	C	X
Bromine—Anhydrous	X	X	A	X	X	X	C	C	X
Bromine Trifluoride	X	X	X	X	X	X	X	X	X
Bromine Water	—	—	A	—	—	B	—	A	—
Bromobenzene	X	X	B	X	X	X	X	X	X
Bromochloromethane	X	X	X	X	X	X	B	C	X
Bromochlorotrifluoroethane	X	X	A	X	X	X	X	X	X
Bromoethylene	X	X	B	X	X	X	C	X	X
Bromomethane	C	—	A	C	C	X	A	X	—
Bromopentane	X	X	B	X	X	X	X	X	X
Bromotoluene	X	X	B	X	X	X	X	X	X
Bronzing Liquid	C	—	X	X	X	X	B	C	A
Brown Acetate	B	—	X	B	B	B	A	A	A
Brucite	A	A	B	B	B	B	A	A	A
Budium	—	—	—	—	—	—	—	—	—
Bunker C	X	X	A	A	A	B	X	X	X
Bunker Oil	X	X	A	A	A	A	X	X	X
Burnt Alum	A	A	A	A	A	A	A	A	A
Burnt Lime	A	A	—	A	A	A	A	A	A
Burnt Potash	A	—	—	B	B	A	—	—	—
Burrow's Solution	A	—	—	B	B	B	—	—	—
Butadiene	X	X	B	X	X	B	C	B	A
Butanal (Butal)	X	X	X	X	X	C	B	C	—
Butane	X	X	A	A	A	B	C	A	—
Butane 2, 2-dimethyl	X	C	A	A	A	B	X	B	—
Butane 2, 3-dimethyl	X	C	A	A	A	B	X	B	—
Butanoic Acid	C	—	C	C	C	C	C	C	—
Butanol (Butyl Alcohol)	A	A	A	A	A	A	B	A	—
Butanone	X	X	X	X	X	X	A	X	A
Butanol	A	—	—	B	B	B	—	—	—
1-Butene	X	X	A	A	A	A	X	X	X
1-Butene, 2-Ethyl	X	X	A	A	A	A	X	X	—
Butoxyethanol	X	X	C	B	B	C	A	B	A
Butter	X	X	A	A	A	C	A	B	A
Butter of Antimony	—	—	A	B	B	—	A	—	—
Butter of Tin	A	—	A	A	A	B	A	A	—
Butter of Zinc	B	—	A	B	B	B	A	A	—
Butyl Acetate	X	X	X	X	X	X	B	X	A
n-Butyl Acetate	C	X	X	X	X	X	X	X	X
Butyl Acetate Ricinoleate	X	X	X	X	X	X	X	X	X
Butyl Acetoacetate	X	X	X	X	X	X	X	X	X
Butyl Acetyl Ricinoleate	C	X	A	X	X	X	C	C	—
Butyl Acrylate	X	X	X	X	X	X	X	X	X
Butyl Alcohol	A	A	A	A	A	A	A	A	A
n-Butyl Alcohol	A	A	A	B	B	A	A	A	A
Butyl Alcohol, Secondary	A	A	A	A	A	A	A	A	A
Butyl Aldehyde	X	X	X	X	X	C	B	C	A
Butyl Amine	C	—	X	B	B	X	X	C	—
Butyl Benzene	X	X	A	X	X	X	X	X	X
Butyl Benzoate	X	X	A	X	X	X	B	X	X
Butyl Benzyl Phthalate	X	X	C	X	X	X	X	X	X
Butyl Bromide	X	X	B	X	X	X	X	X	X
Butyl Butyrate	X	X	X	X	X	X	X	X	X
n-Butyl, n-Butyrate	X	X	A	X	X	X	X	X	X

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Butyl Carbitol	X	X	A	A	A	B	C	A	A
Butyl Cellosolve	X	X	X	B	X	X	X	B	X
Butyl Cellosolve Adipate	X	X	X	X	X	X	X	X	X
Butyl Chloride	X	X	X	X	X	X	X	X	X
Butyl Ether	X	X	X	X	X	X	X	X	X
Butyl Ethyl Acetaldehyde	X	X	X	X	X	X	X	X	X
Butyl Ethyl Ether	X	X	X	B	X	X	X	X	X
Butyl Formate	X	X	X	X	X	X	X	X	X
Butyl Hydrate	A	—	A	A	A	A	A	A	A
Butyl Hydride	X	X	A	A	A	A	B	C	—
Butyl Hydroxide	A	A	X	A	X	A	X	A	X
Butyl Iodide	X	X	X	X	X	X	X	X	X
Butyl Methyl Ketone	—	—	—	—	—	—	—	—	—
Butyl Oleate	X	X	X	X	X	X	B	X	—
Butyl Oxide	X	X	C	A	X	X	—	C	—
Butyl Phthalate	X	X	C	—	—	—	—	—	—
Butyl Stearate	X	X	X	B	—	—	—	—	—
Butyl Tertiary Alcohol	A	A	B	A	B	A	C	X	A
Butylene	X	X	X	X	X	C	C	X	C
Butyraldehyde	X	X	X	X	X	C	C	C	C
Butyric Acid	C	—	C	C	C	C	C	C	C
Butyric Alcohol	A	—	—	B	B	B	—	—	—
Butyric Anhydride	C	—	—	C	C	C	—	—	—
Butyrene	X	X	X	X	X	X	X	X	X
Butyronitrile	—	—	—	—	—	—	—	—	—
Cadium Acetate	X	X	X	X	X	X	X	A	X
Cadmium Cyanide	—	—	—	—	—	—	—	—	—
Cadmium Salts	—	—	—	—	—	—	—	—	—
Cajeputene	X	X	A	C	C	X	X	A	—
Cake Alum	A	—	A	A	A	A	—	—	—
Calamine	B	—	A	B	B	B	—	A	—
Calcine Liquor	—	—	—	A	A	—	—	—	—
Calcium Acetate	A	X	X	B	B	—	—	X	—
Calcium Aluminate	A	—	A	A	A	—	—	—	—
Calcium Bichromate	—	—	—	—	—	—	—	C	A
Calcium Bisulfate	A	A	A	A	A	A	A	A	A
Calcium Bisulfite	A	A	A	A	A	A	A	A	A
Calcium Carbonate	C	—	A	A	A	A	C	A	—
Calcium Chlorate	A	A	A	A	A	A	A	A	A
Calcium Chloride	A	A	A	A	A	A	A	A	A
Calcium Fluorophosphate	—	—	A	—	—	—	—	—	—
Calcium Hydrate	A	A	A	A	A	A	A	B	A
Calcium Hydroxide	A	A	A	A	A	A	A	B	A
Calcium Hypochlorite	C	—	A	C	C	X	A	A	A
Calcium Monoxide	A	A	—	A	A	A	A	A	A
Calcium Nitrate	A	A	A	A	A	A	A	A	A
Calcium Oxide	A	A	A	A	A	A	A	A	A
Calcium Oxychloride-15%	C	—	A	C	C	X	—	A	—
Calcium Silicate	A	—	A	A	A	A	—	A	—
Calcium Salts	A	A	A	A	A	A	A	A	A
Calcium Silico-Aluminate	B	—	—	X	X	X	X	X	X
Calcium Sulfate	A	A	A	A	A	A	A	A	A
Calcium Sulfhydrate	A	A	A	A	A	A	B	A	—
Calcium Sulfide	A	A	A	A	A	A	—	A	—
Calcium Sulfite	A	A	A	A	A	A	—	A	—
Caliche	B	—	—	C	C	—	—	—	—
Caliche Liquors	B	A	A	C	C	B	A	A	A
Calx	A	—	—	A	A	A	A	A	A
Candol	X	X	A	A	A	A	X	X	X
Cane Sugar Liquors	A	A	A	A	A	A	A	X	A
Caprillic Acid	C	—	—	C	C	—	—	B	—
Caproic Aldehyde	X	X	—	—	—	C	X	—	—
Caproxyl Alcohol	X	X	X	X	X	X	X	X	X
Caproyl Alcohol	B	—	B	A	A	A	B	A	—
Caproyl Hydride	X	X	X	X	X	X	X	X	—
Capryl Acetate	X	X	X	X	X	X	X	X	—
Capryl Alcohol	B	—	B	A	A	B	C	A	—
Caprylic Acid	C	—	—	C	C	—	—	B	—
Caprylic Alcohol	B	—	B	A	A	B	—	A	—
Caprylic Aldehyde	X	X	X	X	X	X	X	X	X
Carbamate	X	X	X	C	C	X	B	X	—
Carbamide	A	—	—	B	B	B	—	A	—
Carbazotic Acid	C	—	—	C	C	C	—	A	—
Carbinol	A	A	C	A	B	B	—	A	—
Carbitol	X	X	—	B	B	A	—	B	—
Carbitol Acetate	—	—	—	C	C	—	—	—	—
Carbolic Acid	X	X	A	X	X	C	C	C	A
Carbon Bisulfide	X	—	A	C	C	X	B	X	—
Carbon Dioxide (Wet or Dry)	B	B	B	A	A	X	X	X	—
Carbon Disulfide	X	—	A	C	C	X	X	X	—
Carbon Disulphide	X	—	A	C	C	X	X	X	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Carbon Monoxide	B	B	A	A	A	A	A	A	A
Carbon Monoxide (Hot)	C	—	A	C	C	C	C	B	A
Carbon Tetrachloride	X	—	A	X	X	X	X	X	A
Carb. Tetrafluoride (Freon 14)	X	X	X	X	X	X	B	X	A
Carbonic Acid	A	A	A	A	A	A	A	A	A
Carbonic Anhydride	A	A	A	A	A	A	A	A	A
Carboxybenzene	A	—	—	—	—	A	—	—	—
Casein (Casymer)	A	—	A	A	A	A	A	A	A
Casing Head Gasoline	X	X	—	A	A	—	—	X	—
Castor Oil	B	—	A	A	A	A	B	A	—
Caustic—Baryta	A	A	A	A	A	A	A	A	A
Caustic—Lime	A	—	—	A	A	A	A	A	—
Caustic—Potash	B	—	C	C	C	B	B	A	—
Caustic—Soda	A	—	B	C	C	B	A	B	A
Cellosize	X	X	—	—	—	—	—	—	—
Cellosolve	X	X	X	X	X	X	B	X	A
Cellosolve Acetate	X	X	X	X	X	X	B	X	A
Cellosolve Butyl	X	A	A	A	A	A	A	A	A
Celluguard	B	—	C	B	B	B	—	—	—
Cellulose Acetate	B	—	C	B	B	B	—	—	—
Cellulube Abu	X	X	B	X	X	X	A	X	A
Cellul. 90, 100, 150, 220, 300, 500	X	X	A	X	X	X	A	X	A
Cellutherm 2505A	X	X	A	B	X	X	X	X	X
Cetane (Hexadecane)	X	X	A	A	A	B	X	B	—
Ceylon Gelatin	A	—	—	B	B	B	—	—	—
Chine Niter (Nitre)	B	—	A	C	C	B	A	A	—
Chile Nitrate	B	—	A	C	C	B	A	A	—
Chile Salt Peter	B	—	A	C	C	B	A	A	—
China Bean Oil	X	X	B	A	A	B	C	B	—
China Wood Oil (Tung Oil)	X	X	B	A	A	B	C	B	A
Chinese Bean Oil	X	X	B	A	A	B	C	B	A
Chinese Gelatin	A	—	—	B	B	B	—	—	—
Chinese Wood Oil	X	—	B	A	A	B	C	B	—
Chloroacetic Acid	X	X	X	X	X	X	B	X	—
Chloride of Lime	C	—	A	C	C	X	A	X	—
Chlorextol	X	X	A	B	B	B	X	X	X
Chlorinated Diphenyl	X	X	A	B	B	C	X	A	—
Chlorinated Lime—35%	C	—	A	C	C	X	A	B	—
Chlorinated Salt Brine	B	—	—	—	—	—	—	—	—
Chlorin Solvents (Wet or Dry)	X	X	A	X	X	X	X	X	A
Chlorinated Tar Camphor	X	X	X	X	X	X	X	X	X
Chlorine (Dry)	C	—	A	C	C	C	C	B	A
Chlorine (Wet)	X	X	A	X	X	X	X	X	A
Chlorine Aqueous	X	X	X	X	X	X	X	X	—
Chlorine Dioxide	X	X	A	X	X	X	C	B	—
Chlorine Gas, Dry	C	—	B	C	C	C	X	X	A
Chlorine Gas, Wet	X	X	C	C	C	C	X	X	A
Chlorine Peroxide	X	X	A	X	X	X	C	B	A
Chlorine Trifluoride	X	X	X	X	X	X	X	X	X
Chlorine Water—Sat.	X	X	A	C	C	X	C	B	—
Chlorine Water, 3%	B	—	A	B	B	C	—	B	A
Chloroacetic Acid	X	X	A	X	X	X	B	A	—
Chloroacetone	X	X	—	X	X	B	A	X	A
Chloroacetonitrile	C	—	C	C	C	C	—	—	—
Chloroallylene	X	X	B	X	X	X	X	X	—
Chloroazotic Acid	X	X	A	X	X	X	C	B	—
Chlorobenzal	X	X	X	X	X	X	X	X	X
Chlorobenzene	X	X	A	X	X	X	X	X	A
Chlorobenzol	X	X	A	X	X	X	X	X	X
Chlorobromomethane	X	X	A	X	X	X	B	X	A
Chlorobutadiene	X	X	A	X	X	X	X	C	X
Chlorobutane (Chlorobutanol)	X	X	A	X	X	X	X	X	X
Chloradane	X	X	A	B	B	C	X	C	X
Chlorododecane	X	X	A	X	X	X	X	X	X
Chloroethane	C	—	A	X	X	X	C	X	—
Chloroethanoic Acid	X	X	A	X	X	X	A	B	—
Chloroethanol	C	—	B	X	X	B	A	B	—
Chloroethyl Alcohol	C	—	B	X	X	B	A	B	—
Chloroethylbenzene	X	—	A	X	X	X	X	X	X
Chloroform	X	X	A	X	X	X	X	X	A
Chloromethane (Chloromethyl)	X	X	B	X	X	X	C	—	—
0-Chloronaphthalene	X	X	A	X	X	X	X	X	X
1-Chloro 1-Nitro Ethane	X	X	C	X	X	X	X	X	X
Chlorinated Hydrocarbons	X	X	A	X	X	X	X	X	A
Chloropentane	X	X	A	X	X	X	X	X	X
Chlorophenic Acid	X	X	B	X	X	X	X	X	X
0-Chlorophenol	X	X	B	X	X	X	X	X	X
Chloroprene	X	X	A	X	X	X	X	C	X
Chloropropanone	X	X	X	X	X	X	X	X	X
Chloropropene	X	X	B	X	X	X	X	X	X

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Chloropropylene	X	X	X	X	X	X	X	X	X
Chloropropylene Oxide	X	X	X	X	X	X	X	B	C
Chlorosulphonic Acid	X	X	X	X	X	X	X	C	X
Chlorothene	X	X	A	X	X	X	X	X	X
Chlorotoluene	X	X	A	X	X	X	X	X	X
Chlorotrifluoroethylene	X	X	X	X	X	X	X	X	X
Chlorox	X	X	A	X	X	X	X	B	X
Chrome Alum	A	—	—	A	A	A	A	—	—
Chrome Ammonium Alum	A	—	—	A	A	A	A	—	—
Chrome Plating Solutions	X	X	A	X	X	X	X	C	X
Chromic Acid to 25%	X	X	A	X	X	X	A	A	—
Chromic Acid over 25%	X	X	A	X	X	X	C	C	—
Chromicoat	X	X	X	X	X	X	X	X	—
Chromic Oxide	X	X	A	X	X	X	C	B	—
Chromium Ammonium Sulfate	A	X	—	A	A	A	X	X	—
Chromium Potassium Sulfate	A	X	—	A	A	A	X	X	—
Chrysolepic Acid	C	—	A	C	C	C	A	C	—
Cinene	X	X	A	C	C	C	X	X	—
Circo Light Process Oil	X	X	A	A	A	A	X	X	X
Circosol 2XH	C	C	—	A	A	—	C	—	—
Citric Acid	A	—	A	B	B	B	A	—	A
Citric Acid—Ammoniated	A	—	A	B	B	B	A	—	A
Citrus Oils	X	X	X	C	C	C	B	X	X
City Svc Kool Mtr-AP Gear Oil 140	X	X	A	A	A	A	X	B	X
City Service Pacemaker #2	X	X	A	A	A	B	X	X	X
City Service #65, #120, #250	X	X	A	A	A	B	X	X	X
Cleaners Naptha	X	X	A	B	B	B	X	X	X
Coal Oil	X	X	A	A	A	X	X	C	X
Coal Tar—Bituminous	X	X	A	B	B	C	X	X	X
Coal Tar—Creosote	X	X	A	A	A	C	X	B	X
Coal Tar Naptha	X	X	A	X	X	X	X	X	X
Cobalt Chloride (2N)	A	—	A	A	A	A	C	A	—
Cobalt Chloride	A	—	A	A	A	A	A	A	A
Coconut Oil (Butter)	X	X	A	B	B	B	A	B	A
Cod Liver Oil	X	X	A	B	B	B	A	B	—
Coke Oven Gas	C	—	A	C	C	C	X	A	—
Cologne Spirits	A	A	B	A	A	A	A	A	A
Colonial Spirit	A	A	C	A	A	A	B	A	—
Coliche Liquors	A	B	—	B	B	A	B	—	—
Columbian Spirits	A	A	C	A	A	A	B	A	—
Colza Oil	X	X	A	B	B	B	A	B	—
Common Alum	A	A	A	A	A	A	A	A	A
Convelex 10	X	X	X	X	X	X	X	X	X
Coolanol (Monsanto)	X	X	A	A	A	A	X	B	—
Coolanol #45 (Monsanto)	X	X	A	A	A	A	X	B	—
Copper Acetate	A	X	X	B	B	B	A	A	—
Copper Arsenate, Basic	A	—	A	A	A	A	A	A	A
Copper Chloride	A	A	A	A	A	A	A	A	A
Copper Cyanide	A	A	A	A	A	B	A	B	A
Copper Hydrate	C	—	C	B	B	—	—	B	—
Copper Hydroxide	C	—	C	B	B	—	—	B	—
Copper Lasur	C	—	A	A	A	—	—	A	—
Copper Nitrate	B	—	A	A	A	A	A	A	A
Copper Nitrite	C	—	A	A	A	—	—	A	—
Copper Sulfate	C	C	A	A	A	A	A	A	A
Copper Sulfide	C	—	A	A	A	A	—	A	—
Copper Ferrous Sulfate	C	—	A	A	A	A	—	A	—
Copra	X	X	A	B	B	B	A	B	A
Corn Oil	X	X	A	A	A	A	A	B	A
Corn Syrup (Sugar)	B	—	A	B	B	B	A	A	—
Corrosive Sublimate	B	—	A	A	A	B	A	A	A
Cottonseed Oil	X	X	A	A	A	X	A	B	—
Cresol	X	X	A	C	C	X	X	X	—
Creosote—Wood Tar	X	X	A	A	A	X	X	X	—
Creosote—Coal Tar	X	X	A	A	A	B	X	B	—
Cresols	X	X	A	C	C	X	X	B	—
Cresyl Alcohol	X	X	A	C	C	X	X	X	—
Cresyl Hydrate	X	X	A	C	C	X	X	C	—
Cresylic Acid	X	X	A	C	C	X	X	X	—
Crotonaldehyde	X	X	X	X	X	X	X	X	X
Crude Oil	X	X	A	A	A	C	X	X	X
Cryolite	A	—	A	B	B	B	A	A	—
Cryolite, 10%	—	—	A	B	B	B	A	A	—
Crysoat F.H. Rinse	X	X	X	X	X	X	X	X	X
Crysoat H.C.	X	X	X	X	X	X	X	X	—
Crysoat L.T. & S.W.	X	X	X	X	X	X	X	X	—
Crystal Ammonia	X	X	X	X	X	X	X	X	—
Cubic Niter	B	—	A	C	C	B	A	A	—
Cubic Saltpeter	B	—	A	C	C	B	A	A	—
Cubnic	B	—	A	C	C	B	A	A	—



## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Cumene	X	X	A	X	X	X	X	X	—
Cupric Acetate	—	A	—	B	B	A	A	B	—
Cupric Arsenate	A	A	A	A	A	A	A	A	—
Cupric Carbonate	C	—	A	A	A	—	A	A	—
Cupric Chloride	B	—	A	A	A	A	A	A	A
Cupric Cyanide	A	A	A	A	A	B	A	B	A
Cupric Hydroxide	C	—	A	A	A	—	A	B	—
Cupric Nitrate	B	—	A	A	A	—	A	A	—
Cupric Nitrite	C	—	A	A	A	—	A	A	—
Cupric Sulfate	C	—	A	A	A	A	A	A	A
Cupric Sulfide	C	—	A	A	A	—	A	B	—
Cutting Oil	X	X	A	A	A	B	A	B	—
Cyanomethane	B	X	C	C	C	A	X	B	—
Cyclohexane	X	X	A	B	B	X	X	X	—
Cyclohexanol	C	—	A	B	B	A	C	C	—
Cyclohexanone	X	X	X	X	X	—	C	—	—
Cyclohexatriene	X	X	A	B	B	A	X	X	X
Cyclopentane	X	X	A	B	B	—	—	X	—
Cyclopentanone	X	X	B	X	X	X	X	X	X
Cymene	X	X	A	C	C	X	X	X	—
p-cymene	X	X	A	X	X	X	X	X	—
DBP	X	X	B	X	X	X	X	X	—
DDT in Deodorized Kerosene	X	X	A	A	A	B	X	X	—
DMF	X	X	X	X	X	X	X	X	—
DMP	X	X	C	X	X	X	B	X	—
DOP	X	X	—	X	X	X	—	—	—
Danforth's Oil	X	X	A	A	A	C	X	C	—
Decahydronaphthalene	X	X	A	X	X	X	X	X	—
Decalin (Deklin)	X	X	A	X	X	X	X	X	—
Decanal	X	X	X	X	X	X	X	X	X
Decane	B	X	B	A	A	X	C	A	—
Decanol (Decyl Alcohol)	X	—	B	A	A	X	—	A	—
Decyl Aldehyde	X	X	X	X	X	X	X	X	—
Decyl Butyl Phthalate	X	X	C	X	X	X	X	X	—
Degreasing Fluid	X	X	A	X	X	X	X	X	X
Dehydrated Alcohol	A	A	B	A	A	A	A	A	A
Deionized Water	A	A	—	B	B	—	—	—	—
Delco Brake Fluid	—	A	C	C	B	A	B	A	—
Denatured Alcohol	A	A	B	A	A	B	A	A	—
Detergent Solutions	B	A	A	A	A	B	A	A	—
Developing Fluid (Photo)	A	A	A	A	A	A	A	A	A
Dextron	X	X	A	A	A	B	X	X	—
Dextronic Acid	X	X	—	C	C	—	—	B	—
Dextrose	B	—	A	B	B	B	A	A	—
Diacetic Acid	B	—	—	X	X	X	—	—	—
Diacetic Ester	B	—	—	X	X	X	—	—	—
Diacetic Ether	B	—	—	X	X	X	—	—	—
Diacetone	X	X	X	X	X	—	A	X	—
Diacetone Alcohol	B	B	C	X	X	B	B	B	—
Diacetyl Acetic Acid	B	—	—	X	X	X	—	—	—
Diamine (Diamidogen)	—	—	C	B	B	C	—	B	—
Diaminoethane	B	—	X	B	B	A	A	A	—
Diammonium Orthophosphate	A	A	A	A	A	A	A	A	—
Diamylamine	A	—	—	A	B	—	—	C	—
Diamylene	X	X	C	C	C	X	X	X	X
Diamyl Nephthalene	X	X	A	X	X	X	X	X	X
Diamyl Phenol	X	X	A	X	X	X	X	X	X
Diatol	X	X	—	X	X	X	X	X	—
Diazinone	X	X	X	X	X	X	X	X	—
Dibenzyl Ether	X	X	C	X	X	X	C	X	—
Dibenzyl Sebacate	X	X	B	X	X	X	X	X	—
Dibromobenzene	X	X	A	X	X	X	X	X	—
1, 2-Dibromomethane	X	X	B	X	X	X	C	X	—
Dibromomethylbenzene	X	X	A	X	X	X	X	X	—
Dibutyl	X	X	A	A	A	X	X	X	—
Dibutyl Acetate	X	X	X	X	X	X	X	X	X
Dibutyl Amine	B	—	B	C	C	X	X	C	—
Dibutyl Ether	X	X	C	B	B	C	C	C	—
Dibutyl Phthalate	X	X	B	X	X	X	X	X	—
Dibutyl Sebacate	X	X	B	X	X	X	B	X	—
Dicalcium Phosphate	A	—	A	A	A	—	—	A	—
Dichloroacetic Acid	B	—	X	X	X	—	—	X	—
O-Dichlorobenzene	X	X	A	X	X	X	X	X	—
p-Dichlorobenzene	X	X	A	X	X	X	X	X	—
Dichlorobutane	X	X	A	X	X	X	X	X	—
Dichloro-difluoromethane	X	X	B	B	B	X	B	C	—
Dichloroethane	X	X	A	X	X	X	X	X	—
Dichloroethanoic Acid	B	X	X	X	X	—	—	—	—
Dichloroether	X	X	X	X	X	X	X	X	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Dichloroethylene	X	X	A	X	X	X	X	X	—
Dichloroethylether	X	X	A	X	X	X	X	X	—
Dichlorofluoromethane	X	X	X	X	X	X	X	X	—
Dichlorohexane	X	X	A	X	X	X	X	X	—
Dichloroisopropylether	X	X	C	X	X	X	X	X	—
Dichloromethane	X	X	B	X	X	X	C	X	—
Dichloropentane	X	X	A	X	X	X	X	X	—
Dichloropropane	X	X	B	X	X	X	X	X	—
Dichlorotetrafluoroethane	X	X	X	X	X	X	X	X	—
Dicyclohexylamine	X	X	X	X	X	X	X	X	—
Dieldrin in xylene	X	X	B	B	X	X	X	X	—
Dieldrin in xylene & water spray	X	X	B	X	B	B	X	X	—
Dielene	X	X	A	X	X	X	X	X	—
Diesel Oil	X	X	A	A	A	B	X	X	—
Diester Lubricant MIL-L-7808	X	X	A	B	B	X	X	X	—
Diester Syn. Lub. Oil	X	X	A	B	B	X	X	X	—
Diethanol Amine	B	—	—	B	B	—	—	C	—
Diethyl Amine	B	B	X	C	C	—	B	C	—
Diethyl Benzene	X	X	A	X	X	—	X	X	—
Diethyl Carbinol	A	—	B	A	A	—	—	A	—
Diethyl Carbonate	X	X	X	X	X	X	X	X	—
Diethyl Ether	X	X	X	B	B	X	X	C	—
Diethyl Ketone	X	X	X	X	X	X	B	X	—
Diethyl Oxalate	C	—	—	X	X	X	X	—	—
Diethyl Oxide	X	X	X	B	B	X	X	C	—
Diethyl Phthalate	X	X	C	X	X	X	X	X	—
Diethyl Sebacate	X	X	A	X	X	X	B	X	—
Diethyl Sulfate	X	X	X	X	X	X	X	X	—
Diethyl Triamine	B	—	—	B	B	—	—	C	—
Diethylene Dioxide	X	X	X	X	X	X	A	X	—
Diethylene Ether	X	X	X	X	X	X	X	X	—
Diethylene Glycol	X	A	A	A	A	A	A	A	—
Diethy. Glycol-Dialky Ether	X	X	X	A	A	X	X	X	—
Diethy. Glyc.-Monalkyl Ether	X	X	X	A	A	X	X	X	—
Diethy. Gly.-Monobutyl Ether	X	X	A	A	A	B	A	A	—
Dieth. Gly.-Monoethyl Ether	X	X	A	B	B	X	B	B	—
Diethylene Oxide	X	X	X	B	B	X	A	A	—
Diethylene Triamine	B	—	—	B	B	—	—	C	—
Difluorodibromomethane	X	X	X	X	X	—	B	X	—
Digallic Acid	A	A	X	C	C	X	B	A	—
Dihydroxydiethyl Amine	B	—	—	B	B	—	—	C	—
Dihydroxydiethyl Ether	A	—	—	A	B	—	—	C	—
Dihydroxyethyl Amine	B	—	—	B	B	—	—	C	—
Dihydroxypropane	A	A	A	A	A	—	A	A	—
Dihydroxysuccinic Acid	A	—	A	A	B	C	B	A	—
Diisobutyl Ketone	—	X	—	—	—	—	B	—	—
Diisobutylene	X	X	A	B	B	C	—	C	—
Diisodecyl Adipate	X	X	C	X	X	X	X	X	—
Diisodecyl Phthalate	X	X	C	X	X	X	A	X	—
Diisooctyl Adipate	X	X	C	X	X	X	X	X	—
Diisooctyl Phthalate	X	X	C	X	X	X	X	X	—
Di-isoprene	X	X	A	C	C	X	X	X	—
Diisopropanol Amine	B	—	—	B	B	—	—	C	—
Diisopropyl Amine	B	—	—	B	B	—	—	C	—
Diisopropyl Benzene	X	X	A	X	X	X	X	X	—
Diisopropyl Ether	X	X	X	B	B	X	X	C	—
Diisopropyl Ketone	X	X	X	B	B	X	X	X	—
Dilauryl Ether	X	X	X	B	B	—	X	X	—
Dimethyl Amine	B	—	—	B	B	—	C	X	—
Dimethyl Aniline	X	X	C	X	X	X	B	X	—
Dimethyl Benzene	X	—	A	C	C	X	X	X	—
Dimethyl Carbinol	A	—	A	B	B	X	B	A	—
Dimethyl Ether	X	X	X	A	A	X	X	B	—
Dimethyl Formamide	X	X	A	C	C	X	X	X	—
Dimethyl Ketol	B	—	—	—	—	—	—	X	—
Dimethyl Ketone	B	—	X	X	X	C	A	B	—
Dimethyl Methane	X	—	A	A	A	A	X	B	—
Dimethyl Malonate	A	—	A	C	C	X	X	—	—
Dimethyl Phenol	X	X	A	X	X	X	X	X	—
Dimethyl Phthalate	X	X	C	X	X	X	B	X	—
Dimethyl Phosphite	A	—	—	A	A	A	A	—	—
Dimethyl Sulfate	X	X	X	X	X	X	X	X	—
Dimethyl Sulfide	X	X	X	X	X	X	X	X	—
Dinitrobenze	X	X	A	X	X	X	X	X	—
Dinitrotoluene	X	X	B	X	X	X	X	X	—
Diocetyl Adipate	X	X	C	X	X	X	B	X	—
Diocetyl Amine	B	—	—	—	—	—	—	C	—
Diocetyl Phthalate	X	X	A	X	X	X	B	X	—
Diocetyl Sebacate	X	X	B	X	X	X	B	X	—
Dioform	X	X	A	X	X	X	X	X	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Dioxane (Dioxan)	X	X	X	X	X	X	X	X	—
Dioxethylene Ether	X	X	X	X	X	X	X	X	—
Dioxolanes	X	X	X	X	X	X	B	X	—
Dipentene	X	X	A	C	X	X	X	X	—
Diphenyl	X	X	X	X	X	X	X	X	—
Diphenyl Oxide	X	X	X	X	X	X	X	X	—
Diphenyl Phthalate	X	X	C	X	X	X	X	X	—
Dippei's Oil	X	X	A	A	A	X	X	X	—
Dipropyl Amine	B	—	—	B	B	—	—	C	—
Dipropylene Glycol	A	A	A	A	A	—	—	A	—
Dipropyl Ketone	X	X	X	X	X	X	X	X	—
Dipropyl Methane	X	X	A	A	A	A	X	B	—
Disodium Phosphate	A	A	—	A	A	—	—	A	—
Dispersing Oil #10	X	X	C	X	X	X	X	X	—
Distilled Vinegar	A	A	A	C	C	B	A	B	—
Divinyl Benzene	X	X	A	X	X	X	X	X	—
Divinyl Ether	X	X	X	X	X	X	X	B	—
DMP	X	X	X	X	X	X	X	X	—
Dodecanol	A	—	B	A	A	—	—	A	—
Dodecyl Alcohol	A	—	B	A	A	—	—	A	—
Dodecyl Benzene	X	X	A	X	X	X	X	X	—
Dodecyl Toluene	X	X	A	X	X	X	X	X	—
Douglas Fir Oil	—	X	—	B	B	X	—	—	—
Dow Chemical 50-4	X	X	X	—	—	B	A	B	—
Dow Chemical ET 378	X	X	X	X	X	X	A	X	—
Dow Chemical ET 588	X	A	X	C	C	B	A	B	—
Dow Corning #3	A	A	A	A	A	A	A	A	—
Dow Corning #4	A	A	A	A	A	A	A	A	—
Dow Corning #5, 11, 33	A	A	A	A	A	A	A	A	—
Dow Corning #44,55,200,220	A	A	A	A	A	A	A	A	—
Dow Corning #510, 550	A	A	A	A	A	A	A	A	—
Dow Corning #704, 705	—	A	A	B	B	—	A	—	—
Dow Corn. #710,1208,4050,6620	A	A	A	A	A	A	A	A	—
Dow Corning #F60,F61,XF60	A	A	A	A	A	A	A	A	—
Dowfume W-40, 100%	X	A	C	X	X	X	C	X	—
Dow Gen Weed Kill (phen. base)	X	X	X	X	X	X	X	X	—
Dow Gen Weed Kill (wat'r base)	X	X	X	B	B	X	X	X	—
Dowguard	A	A	A	A	A	A	A	A	—
Dowper (perchloroethylene)	X	X	A	X	X	X	X	X	—
Dow Purifloc C-31	A	—	—	A	A	A	—	—	—
Dowtherm A	X	X	A	X	X	X	X	X	—
Dowtherm E	X	X	A	X	X	X	X	X	—
Dowtherm 209 50%	—	—	X	C	C	B	A	—	—
Dowtherm Oil	—	—	A	—	—	—	—	—	—
Dowtherm S.R.-1	A	—	A	A	A	—	—	A	—
Drinking Water	A	A	A	A	A	B	A	A	A
Drycleaning Fluids	X	X	A	C	C	X	X	X	—
Drycleaning Solvent	X	X	A	X	X	X	X	X	A
Drycid	C	—	—	—	—	C	—	—	—
DTE light oil	X	X	A	A	A	B	X	X	X
Dutch Oil	X	X	X	X	X	X	X	X	—
Dutch Liquid	X	X	X	X	X	X	X	X	—
Earth Pitch	X	X	A	A	A	B	X	B	—
Elco 28-EP Lub.	X	X	A	A	A	C	X	X	—
Epichlorohydra	X	X	X	X	X	X	X	C	—
Epoxy Resins	—	—	X	—	—	A	A	—	—
Epsom Salts	A	A	A	A	A	A	A	A	—
Esam-6 Fluid	—	A	X	—	—	B	A	B	—
Essence of Myrbane	X	X	A	X	X	C	X	X	—
Esso Fuel 208	X	X	A	A	A	B	X	C	—
Esso Motor Oil ND	X	X	A	A	A	C	X	X	—
Esso Transmiss. Fluid Type A	X	X	A	A	A	B	X	X	—
Esso WS3812 (Mill-7808-A)	X	X	A	A	A	X	X	X	—
Esso XP90-EP Lub.	X	X	A	A	A	B	X	B	—
Esstic 42, 43	X	X	A	A	A	B	X	X	—
Ethamine	B	—	X	X	X	X	A	C	—
Ethanal	C	—	X	X	X	C	A	C	—
Ethanamide	C	—	B	B	B	B	A	B	—
Ethane	X	—	A	A	A	B	X	B	—
Ethane Nitrile	B	—	X	C	C	A	A	B	—
Ethanedioic Acid	B	—	C	B	B	B	A	A	—
Ethanethiol	X	X	B	X	X	X	X	X	—
Ethanoic Acid (Acetic Acid)	—	—	—	—	—	—	—	—	—
Ethanol	A	—	B	A	A	B	A	A	—
Ethanolamine	A	B	C	A	B	B	A	B	—
Ethanbyl Chloride	X	X	B	X	X	X	C	X	—
Ether	X	X	B	B	B	X	X	B	—
Ethine	A	—	A	A	A	B	A	B	—
Ethocel	B	B	A	B	B	B	B	B	—
Ethoxyethane	X	X	X	B	B	C	X	C	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Ethoxyethanol	X	X	B	C	C	C	A	B	—
Ethyl Acetate	X	X	X	X	X	X	B	—	A
Ethyl Acetic Acid	C	—	C	C	C	C	B	X	—
Ethyl Aceto Acetate	C	C	X	X	X	X	C	B	—
Ethyl Acrylate	X	X	X	X	X	X	B	X	—
Ethyl Alcohol	A	—	B	A	A	B	A	A	—
Ethyl Aldehyde	C	—	X	X	X	X	A	C	—
Ethyl Aluminum Dichloride	X	X	B	X	X	X	X	X	—
Ethyl Amine	B	—	X	X	X	X	A	C	—
Ethyl Benzene	X	X	A	X	X	X	X	X	—
Ethyl Benzoate	X	X	A	X	X	X	B	X	—
Ethyl Bromide	B	—	X	X	X	X	B	X	—
Ethyl Butanoate	X	X	X	X	X	X	X	X	—
Ethyl Butanol	A	—	B	A	A	—	—	A	—
Ethyl Butyl Acetate	X	—	X	X	X	X	X	X	—
Ethyl Butyl Alcohol	A	—	B	A	A	—	—	A	—
Ethyl Butyl Amine	B	—	—	A	B	—	—	C	—
Ethyl Butyl Ketone	X	X	X	X	X	X	X	X	—
Ethyl Butyraldehyde	X	X	X	X	X	X	X	X	—
Ethyl Butyrate	X	X	C	X	X	X	X	X	—
Ethyl Butyric Acid	X	X	C	X	X	X	X	X	—
Ethyl Caprylate	X	X	X	X	X	X	X	X	—
Ethyl Caprylic Ester	X	X	X	X	C	X	X	X	—
Ethyl Cellulosolve	X	X	B	C	C	C	B	B	—
Ethyl Cellulose	B	—	A	B	B	B	A	B	—
Ethyl Chloride	B	—	A	C	C	B	C	B	—
Ethyl Chlorocarbonate	X	X	A	—	—	—	—	C	—
Ethyl Chloroformate	X	X	A	—	—	C	—	C	—
Ethyl Cyanide	A	X	X	X	X	B	A	A	—
Ethyl Cyano Acetate	A	—	—	X	X	A	X	—	—
Ethyl Cyclopentane	X	X	A	A	A	X	X	X	—
Ethyl Diacetate	B	—	X	X	X	X	X	X	—
Ethyl Dichloride	X	X	B	X	X	B	X	B	—
Ethyl Dimethyl Acetate	X	X	—	X	X	X	X	X	—
Ethyl Ether	X	X	X	B	B	X	X	B	—
Ethyl Formate	X	X	C	X	X	B	B	X	—
Ethyl Formic Ester	X	X	C	X	X	B	B	X	—
Ethyl Hexanol	X	X	A	C	C	X	X	B	—
Ethyl Hexoic Acid	C	—	—	C	C	—	—	B	—
Ethyl Hexyl Acetate	X	—	X	X	X	—	—	B	—
Ethyl Hexyl Alcohol	A	—	B	A	A	—	—	A	—
Eth. Hex. Diphenyl Phosphate	X	X	—	X	X	X	—	—	—
Ethyl Hexyl Phthalate	X	X	X	X	X	X	X	—	—
Ethyl Hydrate	A	A	B	A	A	A	A	A	—
Ethyl Hydroxide	A	—	—	B	B	—	—	—	—
Ethyl Iodide	X	X	B	X	X	X	C	X	—
Ethyl Isobutyl Ether	X	X	X	X	X	X	X	B	—
Ethyl Isobutyrate	X	X	X	X	X	X	X	X	—
Ethyl Mercaptan	X	X	B	X	X	X	X	X	—
Ethyl Methyl Carbinol	A	—	A	A	A	A	—	—	—
Ethyl Methyl Ketone	X	X	X	X	X	X	A	X	—
Ethyl Orthosilicate	C	—	A	A	A	A	A	A	—
Ethyl Oxalate	A	A	A	X	X	X	A	X	—
Ethyl Oxide	X	X	X	B	B	X	X	B	—
Ethyl Pentachlorobenzene	X	X	A	X	X	X	X	X	—
Ethyl Phthalate	X	X	C	X	X	X	X	X	—
Ethyl Propionate	X	X	X	X	X	X	X	X	—
Ethyl Propyl Ether	X	X	X	C	C	X	X	B	—
Ethyl Propyl Ketone	X	X	X	X	X	X	X	A	—
Ethyl Propyl Oxide	X	X	X	C	C	X	X	B	—
Ethyl Silicate	C	—	A	A	A	A	A	A	—
Ethyl Sulfate	X	X	X	X	X	X	X	X	—
Ethyl Sulfhydrate	X	X	B	X	X	X	X	X	—
Ethylene	—	—	A	B	B	—	C	A	—
Ethylene Alcohol	A	A	A	A	A	A	A	A	—
Ethylene Bromide	X	X	B	X	X	X	C	X	—
Ethylene Chloride	X	X	B	X	X	X	C	X	—
Ethylene Chlorohydrin	C	B	B	X	X	B	A	B	—
Ethylene Diamine	B	B	X	B	X	A	A	A	—
Ethylene Dibromide	X	X	B	X	X	X	C	X	—
Ethylene Dichloride	X	X	B	X	X	X	B	X	—
Ethylene Glycol	A	A	A	A	A	A	A	A	—
Eth. Gly. Monobutyl Ether	X	X	C	B	B	C	A	B	—
Eth. Gly. Monoethyl Eth. Ace	C	X	A	C	C	C	X	A	—
Eth. Gly. Monomethyl Ether	X	X	X	C	C	C	A	B	—
Ethylene Monoacetate	C	—	A	C	C	X	A	X	—
Ethylene Oxide	X	X	C	X	X	X	X	X	—
Ethylene Trichloride	X	X	A	X	X	X	X	X	—
Ethylic Acid (See Acetic Acid)	—	—	—	—	—	—	—	—	—
Ethylic Alcohol	A	A	B	A	A	A	A	A	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Ethylc Ether	X	X	X	B	B	C	X	C	—
Ethylidene Chloride	X	X	X	X	X	X	X	X	—
Ethylidene Dichloride	X	X	X	X	X	X	X	X	—
Ethylidene Perchloride	X	X	X	X	X	X	X	X	—
Ethyl Morph. Stan. Octoate	X	X	X	X	X	X	B	X	—
Ethyne	A	—	A	A	A	B	A	B	—
Exsiccated Alum	X	X	A	X	X	X	X	X	—
Ex-Tri	X	X	A	X	X	X	X	X	—
Exxon 2380 Turbo Oil	X	X	A	X	X	X	X	X	—
F-60 Fluid (Dow Corning)	A	A	A	A	A	A	A	A	—
F-61 Fluid (Dow Corning)	A	A	A	A	A	A	A	A	—
Fat Lime	A	—	A	A	A	A	A	A	—
Fatty Acids	A	X	A	B	B	B	X	X	—
FC-43 Heptaco. Fluorotri but.	—	X	A	A	A	A	X	A	—
FC-75 Fluorocarbon	—	X	B	A	A	A	A	A	—
Feran	B	—	—	B	B	B	—	—	—
Fermentation Amyl Alcohol	A	X	X	X	X	X	X	A	—
Ferric Acetate	X	X	A	X	X	A	A	A	—
Ferric Bromide	A	A	A	A	A	—	—	A	—
Ferric Chloride	A	A	A	A	A	A	A	A	—
Ferric Dichloride	A	A	A	A	A	A	A	A	—
Ferric Hydroxide	C	—	C	B	B	—	—	B	—
Ferric Nitrate	A	—	A	A	A	A	A	A	—
Ferric Perchloride	A	A	A	A	A	B	—	—	—
Ferric Persulfate	A	—	—	A	A	A	—	—	—
Ferric Salts	A	A	A	A	A	—	—	A	—
Ferric Sesquichloride	A	A	A	A	A	B	A	A	—
Ferric Sesquisulfate	A	A	A	A	A	A	A	A	—
Ferric Sub sulfate	A	A	A	A	A	A	A	A	—
Ferric Sulfate	A	A	A	A	A	A	A	A	—
Ferric Trichloride	A	A	A	A	A	B	A	A	—
Ferric Trisulfate	A	—	—	A	A	A	—	—	—
Ferriferous Chloride	A	—	—	A	A	B	—	—	—
Ferriferous Persulfate	A	—	—	A	A	—	—	—	—
Ferrous Acetate	X	X	X	X	X	X	X	A	—
Ferrous Ammon. Sulfate-30%	—	A	A	—	—	A	—	—	—
Ferrous Chloride	A	—	A	B	B	—	A	B	—
Ferrous Hydroxide	C	—	C	A	A	A	—	—	—
Ferrous Nitrate	A	—	A	A	A	A	—	A	—
Ferrous Sulphate	A	A	A	A	A	A	A	A	—
Ferrous Sulfide	A	A	A	A	A	—	—	A	—
Filter Alum	A	—	—	A	A	A	—	—	—
Firedamp	X	X	A	A	A	B	X	B	—
Firwood Oil	X	X	A	B	B	X	X	X	—
Fish Oil	—	—	A	A	A	—	—	—	—
Flaxseed Oil	X	X	A	A	A	B	B	B	—
Flores Martis	A	—	C	A	A	B	A	A	—
Fluoroboric Acid	A	A	A	A	A	B	A	A	—
Fluorinated Cyclic Ethers	—	X	A	—	—	C	A	C	—
Fluorine (Liquid)	X	X	B	X	X	C	A	X	—
Fluorobenzene	X	X	A	X	X	X	X	X	—
Fluorocarbon Oils	—	—	—	X	X	—	X	X	—
Fluorochloroethylene	X	X	X	—	—	X	X	A	—
Fluorolube	X	X	B	X	X	A	A	A	—
luoromethane	X	—	—	X	X	X	A	A	—
Fluosilicic Acid	A	—	A	B	B	B	B	A	—
Formaldehyde	B	C	A	B	B	B	A	A	—
Formalin	B	—	A	B	B	B	A	A	—
Formamide (Formylamine)	A	A	X	A	A	A	A	—	—
Formic Acid (Formylic Acid)	X	X	C	C	C	B	B	A	—
Formic Aldehyde — 40%	B	C	A	B	B	B	A	A	—
Formonitrile	B	—	A	B	B	C	B	A	—
Fraud's Reagent — 10%	X	—	A	X	X	A	X	A	—
Freon 11	X	X	A	A	A	B	B	A	—
Freon 12	X	X	B	B	B	B	B	C	—
Freon 12 & ASTM #2 Oil (50/50)	X	X	A	A	A	B	X	B	—
Freon 12 & Suniso 4G (50/50)	X	X	A	A	A	X	X	A	—
Freon 13	A	A	A	A	A	A	A	A	—
Freon 13B1	A	A	A	A	A	A	A	A	—
Freon 14	X	X	X	X	X	X	B	X	—
Freon 21	X	X	X	X	X	X	X	X	—
Freon 22	X	X	X	X	X	X	X	X	—
Freon 22 & ASTM #2 Oil (50/50)	X	X	B	X	X	B	X	X	A
Freon 31	B	B	X	X	X	A	A	B	—
Freon 32	A	A	C	A	A	A	A	A	—
Freon 112	X	X	A	B	B	B	X	B	—
Freon 113	X	B	A	B	B	A	B	B	—
Freon 114	A	A	A	A	A	A	C	A	—
Freon 114B2	X	X	B	B	B	A	X	A	—
Freon 115	A	A	B	A	A	A	A	A	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Freon 142B	A	A	X	A	A	A	A	A	—
Freon 152A	A	A	X	A	A	A	A	A	—
Freon 218	A	A	A	A	A	A	A	C	—
Freon 502	A	A	B	B	B	A	A	—	—
Freon BF	X	X	—	B	B	B	—	B	—
Freon C316	A	A	A	A	A	A	A	A	—
Freon C318	A	A	A	A	A	A	A	A	—
Freon MF	X	X	—	A	A	C	A	X	—
Freon PCA	X	B	A	A	A	—	X	A	—
Freon TA	A	A	B	A	A	A	A	A	—
Freon TC	X	A	A	A	A	A	B	A	—
Freon TF	C	X	A	A	A	A	B	A	—
Freon TMC	B	B	A	B	B	B	B	A	—
Freon T-P35	A	A	A	A	A	A	A	A	—
Freon T-WD602	C	B	A	B	B	B	B	A	—
Fruit Juice	C	—	—	—	—	A	—	A	—
Fuel Oil	X	X	A	A	A	B	X	B	—
Fuel Oil, Acidic	X	X	A	A	A	B	X	X	—
Fuel Oil, #6	X	X	A	B	A	X	X	X	—
Fuels — ASTM Ref Fuel A	X	X	A	A	A	A	X	X	—
Fuels, ASTM Ref Fuel B	X	X	A	A	A	C	X	X	—
Fuels, ASTM Ref Fuel C	X	X	A	B	A	C	X	X	—
Fuels, ASTM #1 Oil	X	X	A	A	A	B	X	X	—
Fuels, ASTM #2 Oil	X	X	A	A	A	B	X	—	—
Fuels, ASTM #3 Oil	X	X	A	A	A	B	X	C	—
Fuels, ASTM #4 Oil	X	X	A	B	A	B	X	B	—
Fumaric Acid	B	B	A	C	C	B	—	B	—
Fumarole Acid	A	A	A	A	A	A	A	A	—
Fum. Sulf. Acid (20-25% Oleum)	X	X	A	X	X	X	X	X	—
Fuming Nitric Acid	X	X	C	X	X	X	X	X	X
Furaldehyde	X	X	X	X	X	C	A	B	—
Furan (Furfuran)	X	X	C	X	X	X	X	X	—
Furfural (Furfural)	X	X	X	X	X	C	A	C	—
Furfuraldehyde	X	X	X	X	X	C	A	—	—
Furfuryl Alcohol	X	X	X	X	X	X	B	C	—
Furof	X	X	X	X	X	C	A	C	—
Furyl Carbinol	X	X	X	X	X	X	X	X	—
Fusel Oil	A	—	A	A	A	A	A	X	—
Fyrquel A 60	X	X	X	X	X	X	B	A	—
Fyrquel 90,100,150,220,300,500	X	X	A	X	X	X	A	X	—
G.A.J.	X	B	X	X	X	X	X	X	—
Gallic Acid	A	X	X	X	X	C	B	B	—
Gallotannic Acid	A	A	A	C	C	A	B	A	—
Gasoline, Regular	X	X	A	A	A	B	X	X	—
Gasoline, Unleaded	X	X	A	B	A	C	X	X	—
Gasoline, 40% Aromatic	X	X	A	B	A	B	X	X	—
Gasoline, 65 Octane	X	X	A	A	A	B	X	X	—
Gasoline, 100 Octane	X	X	A	A	A	B	X	X	—
Gaultheria Oil	X	X	B	X	X	X	C	X	—
Gelatin	A	A	A	A	A	A	A	A	—
Generator Gas	C	—	A	A	A	B	C	B	—
German Saltpeter	A	A	A	A	A	A	A	A	—
Gibbsite	A	A	C	B	B	A	A	B	—
Girling Brake Fluid	—	A	X	C	C	B	A	B	—
Glacial Acetic Acid	C	C	C	C	C	C	A	C	—
Glauber's Salt	A	A	A	A	A	A	A	A	—
Gluconic Acid	X	—	—	C	C	—	—	B	—
Glucose	A	A	A	A	A	A	A	A	—
Glue	A	A	A	A	A	A	B	A	—
Glycerin	A	A	A	A	A	A	A	A	—
Glycerol	A	A	A	A	A	A	A	A	—
Glyceryl Hydroxide	A	A	A	A	A	A	A	A	—
Glyceryl Triacetate	B	—	C	B	A	A	—	B	—
Glyceryl Trioleate	X	—	—	B	B	C	—	—	—
Glycogenic Acid	X	X	—	C	C	—	—	B	—
Glycol	A	—	A	A	A	A	A	A	—
Glycol Acetate	C	—	—	C	B	X	B	X	—
Glycol Alcohol	A	X	—	B	B	B	—	—	—
Glycol Butyl Ether	X	—	C	B	B	C	A	B	—
Glycol Chlorohydrin	C	—	B	X	X	B	A	B	—
Glycol Dibromide	X	X	B	X	X	X	C	X	—
Glycol Dichloride	X	X	B	C	C	X	C	X	—
Glycol Ethyl Ether	X	X	B	C	C	X	A	B	—
Glycol Monoacetate	C	—	—	C	C	X	—	X	—
Graham's Salt	A	—	—	—	A	A	—	—	—
Grain Alcohol	A	—	B	A	A	A	A	A	—
Grain Oil	A	A	A	A	A	A	A	A	—
Grease	X	X	A	A	A	B	X	C	—
Green Copperas (Vitrol)	A	A	A	A	A	A	A	A	—
Green Liquor	A	A	A	A	A	A	A	A	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Green Sulfate Liquor	A	A	A	A	A	A	A	A	—
Grey Acetate	B	—	X	B	B	B	X	X	—
Gulfcrown Grease	X	X	A	A	A	B	X	X	—
Gulf Endurance Oils	X	X	A	A	A	B	X	X	—
Gulf FR Fluids (emulsion)	X	X	A	A	A	B	X	X	—
Gulf FRG Fluids	A	A	A	A	A	A	A	A	—
Gulf FRP Fluids	X	X	B	X	X	X	B	X	—
Gulf Harmony Oils	X	X	A	A	A	B	X	X	—
Gulf Hi-Temp Grease	X	X	A	A	A	B	X	X	—
Gulf Paramount Oils	X	X	A	A	A	B	X	X	—
Gulf Security Oils	X	X	A	A	A	B	X	X	—
Halite	A	A	A	A	A	A	A	A	—
Halothane	X	X	A	X	X	X	X	X	—
Halowax	X	X	A	X	X	X	X	X	—
Hannifin Lube A	X	B	A	A	A	A	X	X	—
Hartshorn	A	—	A	X	X	B	A	B	—
Heavy Benzine	X	X	A	A	A	B	X	X	—
Heavy Water	A	A	—	A	A	B	A	A	—
HEF-2 (High Energy Fuel)	X	X	A	B	B	X	X	X	—
Helium	A	A	A	A	A	A	A	A	—
Hepar Calcis	A	A	A	A	A	B	A	A	—
Heptachlor in Petrol. Solvents	—	—	—	—	—	—	—	—	—
Heptanal	X	X	X	X	X	X	X	X	—
n-Heptane	X	X	A	A	A	A	X	B	—
Heptane Carboxylic Acid	X	—	—	C	C	—	—	B	—
Heptyl Ablehyde	X	X	A	A	A	X	X	X	—
Heptyl Carbinol	B	B	A	A	A	A	A	A	—
Heptyl Hydride	X	X	A	A	A	X	X	B	—
Hexachlorodipheylmethane	X	X	X	X	X	X	X	X	—
Hexahydrobenzene	X	X	A	A	A	B	X	B	—
Hexahydrophenol	C	—	A	B	B	A	C	C	—
Hexahydropyridine	X	X	C	X	X	X	X	X	—
n-Hexaldehyde	X	X	C	X	X	A	B	X	—
Hexalin	C	—	A	B	B	A	C	C	—
Hexamethylene	X	X	A	B	B	X	X	X	—
Hexanaphthene	X	X	A	A	A	B	X	B	—
Hexane	X	X	A	A	A	B	X	B	—
n-Hexane-1	X	X	A	A	A	B	X	B	—
Hexanedioic Acid	A	—	—	B	B	X	—	—	—
Hexanol	A	A	B	A	A	B	B	A	—
Hexane-3-one	X	X	X	X	X	X	X	X	—
n-Hexene-1	X	X	A	A	A	B	X	B	—
Hexone (Hexon)	X	X	X	X	X	X	B	X	—
Hexyl Acetic Acid	C	—	—	C	C	—	—	B	—
Hexyl Alcohol	A	A	B	A	A	B	B	A	—
Hexyl Hydride	X	X	A	A	A	B	X	B	—
Hexyl Methyl Ketone	X	X	X	X	X	X	X	X	—
Hexylamine	C	—	X	C	C	—	—	C	—
Hexylene	X	X	A	A	A	B	X	B	—
Hexylene Glycol	A	A	A	A	A	A	C	A	—
High Viscosity Lubricant, U4	—	A	A	A	A	B	A	—	—
High Viscosity Lubricant, H2	—	X	X	X	X	B	A	—	—
HiLo MS #1	X	X	X	X	X	X	A	X	—
Hi-Tri	X	X	A	X	X	X	X	X	—
Houghto-Safe 271 (Water & Glycol)	—	A	B	A	A	B	A	—	—
Houghto-Safe 620 (Water & Glycol)	—	A	B	A	A	B	A	—	—
Hou.-Safe 1010, Phos.Ester	X	X	A	X	X	X	X	X	—
Hou.-Safe 1055, 1120 Phos.Est.	X	X	A	X	X	X	X	X	—
Hou.-Safe 5040 (Water-oil emuls)	X	X	A	A	A	B	X	X	—
Hydrargylite	A	X	C	B	B	A	A	B	—
Hydrargyrum	A	A	A	A	A	A	A	A	—
Hydrated Baryton	A	A	A	A	A	A	A	A	—
Hydrated Lime	A	A	A	A	A	A	B	A	—
Hydraulic Fluids	X	X	A	X	X	X	B	X	A
Hydraulic Oil (Petroleum)	X	—	A	A	A	B	C	B	—
Hydrazine	X	X	C	B	B	C	A	B	—
Hydrazina Benzene	A	—	A	X	X	C	C	C	—
Hydrobromic Acid	B	—	A	X	X	C	A	A	—
Hydrobromic Acid, 40%	A	X	A	X	X	B	A	A	—
Hydrobromic Acid Gas	B	X	X	X	X	X	X	X	—
Hydrocarbons — Alicyclic	X	X	A	B	B	X	X	X	—
Hydrocarbons — Aliphatic	X	X	A	A	A	B	X	X	—
Hydrocarbons — Aromatic	X	X	A	C	C	X	X	X	A
Hydrocarbons — Chlorinated	X	X	A	X	X	X	X	X	A
Hydrocarbons — Normal	X	X	A	A	A	B	X	B	A
Hydrocarbons — Olefinic	—	—	A	A	A	—	—	—	—
Hydrocarbons — Saturated	X	X	A	A	A	—	—	—	—
Hydrochloric Acid, 10%, 6.6BE	A	A	A	B	B	B	A	A	—
Hydrochloric Acid, 20%	A	B	A	B	B	B	A	A	—
Hydrachloric Acid, 25%, 16.0BE	A	B	A	B	B	C	A	A	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Hydroch. Acid, 38%, 30.1BE Hot	X	X	A	X	X	X	C	C	—
Hydroc. Acid, 38%, 30.1BE Cold	B	B	A	B	B	X	B	A	—
Hydrochloric Acid, 50%	A	C	A	X	X	X	C	B	—
Hydrochloric Acid, 100%	X	C	A	X	X	X	C	X	—
Hydrochloric Acid, 3 Molar	C	C	A	C	C	X	C	X	—
Hydrochloric Ether	B	—	A	C	C	B	C	B	—
Hydrocyanic Acid	B	B	A	B	B	C	B	X	—
Hydro-drive MIH50, Pet. Base	X	X	A	A	A	B	X	X	—
Hydro-Drive MIH10, Pet. Base	X	X	A	A	A	B	X	X	—
Hydrofluoric Acid	X	X	X	X	X	X	X	A	—
Hydrofluoric Acid, Anhydrous	X	X	A	X	X	C	C	A	—
Hydrofluoric Acid, 10%	B	B	—	B	B	C	B	A	—
Hydrofluoric Acid, 50%, 24BE	C	C	—	X	X	C	B	A	—
Hydrofluoric Acid, 65%	C	C	X	X	X	C	B	A	—
Hydrofluoric Acid, 65% Hot	X	X	C	X	X	C	X	C	—
Hydrof. Acid, 75%, 30.1BE	X	X	X	X	X	X	C	B	—
Hydrofluoric Acid, 75%, Hot	X	X	C	X	X	X	X	X	—
Hydrofluoroboric Acid	X	—	—	—	—	—	—	—	—
Hydrofluorosilicic Acid	A	B	—	B	B	B	—	A	—
Hydrogen Bromide	B	—	—	X	X	X	—	—	—
Hydrogen Carboxylic Acid	X	—	—	B	B	B	—	—	—
Hydrogen Cyanide	B	B	A	B	B	C	B	A	—
Hydrogen Dioxide, 3%	B	—	A	C	C	C	B	B	—
Hydrogen Dioxide, 10%	C	—	A	C	C	C	B	C	—
Hydrogen Dioxide, 30%	C	—	A	C	C	C	B	C	—
Hydrogen Dioxide, 90%	X	—	A	X	X	X	C	C	—
Hydrogen Gas, Cold or Hot	B	B	A	A	A	A	C	A	—
Hydrogen Oxide	A	A	A	A	A	A	C	A	—
Hydrogen Peroxide, 3%	A	—	A	B	B	C	B	B	—
Hydrogen Peroxide, 10%	B	—	A	C	C	C	B	B	—
Hydrogen Peroxide, 30%	C	—	A	C	C	X	B	C	—
Hydrogen Peroxide, 90%	X	—	A	X	X	X	C	C	—
Hydrogen Sulfide, Dry, Cold	A	A	X	X	X	A	A	A	—
Hydrogen Sulfide, Dry, Hot	X	X	X	X	X	A	A	C	—
Hydrogen Sulfide, Wet, Cold	X	X	X	X	X	A	A	B	—
Hydrogen Sulfide, Wet, Hot	X	X	X	X	X	B	A	C	—
Hydroquinol	—	B	—	C	C	C	X	—	—
Hydroquinone	B	X	X	C	C	X	X	X	—
Hydroxypro. Tricarboxy. Acid	A	—	—	B	B	—	—	—	—
Hydroxyacetic Acid, 10%	X	X	X	X	X	X	C	X	—
Hydroxybenzene	X	X	A	X	X	X	C	C	—
Hydroxybutane	A	—	A	A	A	A	A	A	—
Hydroxybutanedioic Acid	A	—	A	B	B	C	X	B	—
Hydroxyether	X	X	B	C	C	C	A	B	—
Hydroxyethyl Acetate	C	—	A	C	C	B	X	B	—
Hydroxyethyl Amine	B	—	A	B	B	A	A	A	—
Hydroxyformic Acid	A	—	A	A	A	A	A	A	—
Hydroxyoctane	B	—	B	A	A	A	X	A	—
Hydroxysuccinic Acid	A	—	A	B	B	C	X	B	—
Hydrene	B	B	X	B	B	B	A	—	—
Hyjet	X	X	X	X	X	X	X	X	—
Hyjet 3, S, W	X	X	X	X	X	X	X	X	—
Hykil #6, 33%, Water 67%	X	X	X	C	C	X	X	X	A
Hyprone	C	—	X	X	X	X	X	X	—
Hypo (Hypochlorite)	A	A	A	A	A	A	A	A	—
Hypochlorous Acid	B	—	—	X	X	B	—	—	—
I.P.A.	B	—	—	B	B	A	—	—	—
Ice Spar (Stone)	A	—	A	B	B	A	—	—	—
Industron FF44,48,53,80	X	X	A	A	A	A	X	X	—
Iodine (Iodum)	X	X	C	B	B	X	B	B	A
Iodine Pentafluoride	X	X	X	X	X	X	X	X	—
Iodobutane	X	X	X	X	X	X	X	X	—
Iodoethane	X	X	B	X	X	X	C	X	—
Iodoform	—	—	—	—	—	—	—	—	—
Iodopentane	X	X	X	X	X	X	X	X	—
Iron Acetate	X	X	—	X	X	—	X	A	—
Iron Chloride	A	A	A	A	A	—	A	A	—
Iron Dichloride	A	A	A	A	A	B	A	A	—
Iron Hydroxide	C	—	C	B	—	—	—	—	—
Iron Monosulfide	A	A	A	A	A	—	A	A	—
Iron Nitrate	A	A	A	A	A	—	A	A	—
Iron Perchloride	A	—	—	A	A	B	—	—	—
Iron Persulfate	A	—	—	A	A	—	—	—	—
Iron Protochloride	A	A	A	A	A	A	A	A	—
Iron Salts	A	A	A	A	A	—	—	—	—
Iron Susquichloride	A	A	A	A	A	—	—	—	—
Iron Sulfate	A	A	A	A	A	—	—	—	—
Iron Sulfide	A	A	A	A	A	—	—	—	—
Iron Susquisulfate	A	A	A	A	A	—	—	—	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE		NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Iron Tersulfate	A	A	A	A	A	A	A	A	—	Lead Sulfanate	B	B	A	B	B	A	A	A	—
Iron Trichloride	A	A	A	A	A	A	A	A	—	Lead Sulfate	X	X	A	B	B	A	X	X	—
Iron Vitrol	A	A	A	A	A	A	A	A	—	Lead Tetraethyl	X	X	A	B	B	A	X	X	—
Isoamyl Acetate	X	X	X	X	X	X	B	X	A	Lead Tinitro Resorcinol	B	X	—	B	B	A	—	X	—
Isoamyl Acidic Esther	C	—	X	X	X	X	X	C	A	Lehigh X1169, X1170	X	—	A	A	A	B	X	—	B
Isoamyl Alcohol	A	A	A	A	A	A	A	A	—	Leucogen	A	A	A	A	A	A	A	A	—
Isoamyl Aldehyde	—	X	—	—	X	X	X	—	A	Lichenic Acid	C	X	—	X	X	—	—	—	—
Isoamyl Bromide	X	X	B	X	X	X	X	X	—	Light Aniline	X	X	X	X	—	C	—	C	—
Isoamyl Butyrate	X	X	X	X	X	X	X	X	—	Light Grease	X	X	A	A	X	X	X	X	—
Isoamyl Chloride	X	X	A	X	X	X	X	X	—	Light Oil, Residual	X	X	A	A	A	X	X	X	A
Isoamyl Ether	X	X	—	C	C	X	X	C	—	Ligroin (Ligroine)	X	X	A	A	A	B	X	C	—
Isoamyl Phthalate	X	X	C	X	X	—	—	X	—	Lime	A	A	—	A	A	A	A	A	—
Isobutane	X	X	A	A	A	—	—	X	—	Lime, Agricultural	A	A	A	A	A	A	A	B	—
Isobutanol	B	—	B	B	B	B	A	A	A	Lime, Caustic	A	A	A	A	A	A	A	B	—
Isobutyl Acetate	X	X	X	X	X	X	C	C	A	Lime, Soda	A	A	B	A	A	A	A	B	—
Isobutyl Alcohol	B	—	B	B	B	B	A	A	A	Lime and Water	A	A	A	A	A	A	A	B	A
Isobutyl Aldehyde	C	—	X	X	X	C	B	X	A	Lime Acetate	C	C	—	B	B	—	—	—	—
Isobutyl Amine	C	—	X	X	X	—	—	C	—	Lime Bisulfite	C	A	A	A	A	C	A	—	—
Isobutyl Bromide	X	X	B	X	X	X	X	X	—	Lime Bleach	B	B	A	A	A	B	A	—	—
Isobutyl n-butyratc	X	X	C	X	X	X	A	X	—	Lime Hydrate	A	A	A	A	A	A	A	A	—
Isobutyl Carbinol	A	—	—	A	A	A	A	A	—	Lime Nitrate	A	A	A	A	A	A	A	A	—
Isobutyl Chloride	X	—	B	B	X	X	X	X	—	Lime Saltpetcr	A	A	A	A	A	A	A	B	—
Isobutyl Ether	X	—	B	B	B	—	—	—	—	Lime Sulfur (dry)	X	X	A	X	X	A	C	B	A
Isobutyleno	X	X	A	X	—	—	—	X	A	Lime Sulfur (wet)	B	—	A	X	A	A	A	B	—
Isobutyric Acid	A	—	—	C	X	B	A	—	A	Limestone	A	A	A	A	A	A	A	A	—
Isododecane	X	X	A	B	B	A	X	A	—	Limonene	X	X	C	C	X	X	X	X	—
Isooctane	X	X	A	A	A	B	A	B	—	Lindol, Hydraulic Fluid	X	X	B	X	X	C	X	X	—
Isopentane	X	X	A	A	X	X	X	X	—	Linol	X	X	X	X	X	X	X	X	—
Isophorone	X	X	X	X	X	X	X	X	—	Linoleic Acid (Linolenic Acid)	X	X	B	B	X	X	X	C	—
Isopropanol	A	A	A	B	B	A	B	A	A	Linolic Acid	X	X	A	B	X	X	C	—	—
Isopropanol Amine	B	—	—	B	B	—	—	C	A	Linseed Oil	X	X	A	A	A	B	B	B	A
Isopropyl Acetate	X	X	X	A	X	X	B	A	—	Liquidified Petroleum Gas	X	—	A	A	A	B	X	B	—
Isopropyl Alcohol	A	A	A	B	B	A	B	A	A	Liquid Oxygen	X	X	X	X	X	X	X	X	—
Isopropyl Amine	B	—	X	X	X	X	X	C	—	Liquid Rosin (Retinol)	X	X	A	A	A	—	B	—	—



## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Mesityl Oxide (Ketone)	X	X	X	X	X	X	B	X	—
Methadiene	X	X	A	C	C	X	X	X	—
Methallyl Alcohol	A	—	B	A	A	—	A	A	—
Methanal - 40%	B	—	A	B	B	A	A	A	—
Methanamide	A	A	X	A	A	A	A	—	—
Methane	X	X	A	A	A	B	X	B	—
Methanol	A	A	C	A	A	A	B	A	A
Methyl Acetate	X	X	X	X	X	C	A	B	—
Methyl Acetoacetate	X	X	X	X	X	X	X	X	—
Methyl Acetone	C	—	X	X	X	X	X	X	A
Methyl Acrylate	X	X	X	X	X	C	B	X	—
Methyl Acrylic Acid	X	X	B	—	—	B	B	—	—
Methyl Alcohol	A	A	C	A	A	A	B	A	A
Methyl Alcohol - Wood	A	A	X	A	A	A	—	A	A
Methyl Amine	A	—	—	A	B	A	A	X	A
Methyl Amyl Acetate	X	X	X	X	X	X	X	B	A
Methyl Amyl Alcohol	A	—	X	A	A	—	—	A	A
Methyl Amyl Carbinol	A	—	B	A	A	—	—	A	A
Methyl Amyl Ketone	—	—	—	—	—	—	—	—	—
Methyl Aniline	A	A	—	A	A	A	A	—	—
Methyl Benzene	X	X	A	C	C	X	X	X	—
Methyl Bichloride	X	X	B	X	X	X	C	X	—
Methyl Bromide	C	—	A	C	C	X	A	X	—
Methyl D-Bromide	X	X	A	X	X	X	X	X	—
Methyl Butanol	A	—	B	A	A	A	—	A	—
Methyl Butanone	X	X	X	X	X	X	X	X	—
Methyl Butyl Ketone	X	X	X	X	X	X	X	X	—
Methyl Butyrate	X	X	X	X	X	X	X	X	—
Methyl Caritol	—	—	—	C	C	—	—	—	—
Methyl Cellosolve	X	X	X	C	C	A	B	A	—
Methyl Cellulose	B	B	X	B	B	B	B	B	—
Methyl Chloride	X	X	X	X	X	X	A	X	A
Methyl Cyanide	B	—	X	C	C	A	A	B	A
Methyl Cyclohexane	X	X	B	X	X	X	X	X	—
Methyl Cyclopentane	X	X	A	X	X	X	X	X	—
Methyl Ether	X	—	—	A	A	—	—	B	—
Methyl Ethyl Ketone	X	X	X	X	X	X	A	X	A
Methyl Formate	X	X	X	X	X	B	A	C	A
Methyl Hexane	X	X	A	A	A	—	—	B	—
Methyl Hexanol	A	—	B	A	A	—	—	A	—
Methyl Hexanone	X	—	X	X	X	—	—	X	—
Methyl Hexyl Carbinol	X	—	X	B	B	X	—	—	—
Methyl Hexyl Ketone	X	—	X	X	X	—	—	X	—
Methyl Hydrate	A	A	C	A	A	A	B	A	—
Methyl Hydride	X	X	A	A	A	B	X	A	—
Methyl Hydroxide	A	A	C	A	A	A	B	A	—
Methyl Iodide	A	—	—	X	X	X	A	A	A
Methyl Isobutyl Carbinol	B	—	C	B	B	A	A	A	—
Methyl Isobutyl Ketone	X	X	X	X	X	B	X	X	A
Methyl Isopropyl Ketone	X	X	X	X	X	X	C	X	A
Methyl Methacrylate	X	X	X	X	X	X	C	A	A
Methyl Methane	X	X	A	A	A	B	X	B	—
Methyl Normal Amyl Ketone	X	X	X	X	X	X	X	X	—
Methyl Oleate	X	X	B	X	X	X	C	X	—
Methyl Phenol	X	X	A	C	C	X	X	B	—
Methyl Polysiloxanes	X	—	—	A	A	X	—	—	—
Methyl Propanal	A	A	A	A	A	A	A	A	—
Methyl Propyl Benzene	X	X	X	X	X	X	X	X	—
Methyl Propyl Carbinol	A	—	B	A	A	—	—	A	—
Methyl Propyl Ether	—	—	—	X	X	—	—	B	—
Methyl Propyl Ketone	X	X	X	X	X	X	B	X	A
Methyl Salicylate	X	X	B	X	X	X	C	A	—
Methyl Acetal	B	—	X	X	X	C	B	A	—
Methylacrylic Acid	X	X	X	—	—	B	—	—	—
Methylallyl Acetate	X	X	B	X	X	—	B	—	—
Methylallyl Chloride	X	X	C	X	X	—	—	X	—
Methylated Spirits	A	—	B	A	X	B	—	A	—
Methylene Bromide	X	X	B	X	X	—	—	A	B
Methylene Chloride	X	X	B	X	X	X	C	X	A
Methylene Chlorobromide	X	X	X	X	X	X	X	X	—
Methylene Dichloride	X	X	X	X	X	X	X	X	—
MIBK	B	X	X	X	X	X	X	X	A
Milk (Whole)	C	—	A	B	B	A	A	A	—
Milk Acid - 50%	A	A	A	C	B	B	B	A	—
Milk of Magnesia	A	A	A	B	B	B	B	A	—
Mine Fluid 3XF	—	—	A	—	—	—	—	—	—
Mineral Naptha	X	X	A	A	A	C	X	C	—
Mineral Oil	X	X	A	A	A	B	X	B	A
Mineral Pitch	X	X	A	A	A	B	X	B	—
Mineral Spirits	X	X	A	A	A	C	X	B	A

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Mineral Thinner	X	X	X	X	X	X	X	X	—
Miners Oil	—	—	—	—	—	—	—	—	A
Mirabilite	A	A	A	A	A	A	A	A	—
Mittel H.N.A.	C	A	X	X	X	A	A	X	—
M.M.V.	A	—	A	A	A	A	A	A	—
Mobil Jet 2	X	X	A	X	X	X	X	X	—
Mobil SX-90 Oil	X	X	B	X	X	X	X	X	—
Mobil XRM 206A	—	—	—	—	—	—	—	—	—
Mobil 240TE.HF.1100,1110,1120,1130	X	X	A	A	A	A	A	X	—
Mobil Nylvac 20, 30	A	A	A	A	A	A	A	A	—
Mobil Velocite C	X	X	A	A	A	B	X	X	—
Mobil Gas WA200 Type A, ATF	X	X	A	A	A	B	X	X	—
Mobil Oil SAE 20	X	X	A	A	A	B	X	X	—
Mobiltherm 600	X	X	A	A	A	B	X	X	—
Mobilux	X	X	A	A	A	B	X	X	—
Molasses	A	A	A	A	A	A	A	A	—
Molten Sulfur	X	X	A	X	X	A	A	A	X
Molysite	A	A	A	A	A	B	A	A	—
Monoammonium Phosphate	A	A	A	A	A	A	A	A	—
Monobromo benzene	X	X	A	X	X	X	X	X	A
Monobromo Trifluoromethane	—	—	—	—	—	—	—	—	—
Monobutyl Ether	X	X	X	C	C	X	—	X	—
Monochloroethane	B	—	A	C	C	X	C	X	B
Monochloroacetic Acid	B	—	—	X	X	B	X	X	—
Monochloroacetone	X	X	B	X	X	C	X	X	—
Monochlorobenzene	X	X	A	X	X	X	X	X	A
Monochlorodifluoromethane	X	X	X	X	X	X	X	X	—
Monochlorophenol	X	X	B	X	X	X	X	X	—
Monochlorotrifluoromethane	X	X	X	X	X	X	X	X	A
Monoethanolamine	B	—	C	B	B	C	X	B	A
Monoethyl Amine	C	—	X	C	C	—	—	C	—
Monoisopropanol Amine	B	—	—	C	C	—	—	C	—
Monomethyl Amine	X	—	C	X	X	X	X	X	—
Monomethyl Aniline	X	—	C	X	X	X	X	X	—
Monomethyl Ether	C	—	C	X	X	X	X	X	—
Mon'sod. Acid M'than'ars'nat'	—	—	—	—	—	—	—	—	—
Monovinyl Acetate	X	X	—	X	X	A	—	X	—
Monovinyl Acetylene	B	—	A	A	A	B	A	B	—
Monsell's Salt	A	A	A	A	A	A	A	A	—
Mopar Brake Fluid	—	A	X	C	C	B	A	B	—
Morea Premic	A	—	—	—	—	—	—	—	—
Morrhua Oil	X	X	A	B	B	—	—	—	—
Mosaic Gold	A	—	—	A	A	—	—	—	—
Motor Spirits	X	—	A	B	B	X	A	A	—
Muriate of Ammonia	A	—	A	A	A	A	A	A	—
Muriatic Acid	A	—	A	X	X	X	C	B	—
Mustard Gas	A	—	A	—	—	—	—	—	—
Muthmann's Liquid	X	—	—	X	X	X	—	—	—
Napha	X	X	A	A	A	C	X	X	A
Napha - Coal Tar	X	X	A	X	X	X	X	X	—
Napthalene (Naphthaline)	X	X	A	X	X	X	X	X	A
Napthenic Acid	X	X	A	B	B	X	X	—	—
Naphthylbenzene	X	X	—	X	X	X	—	—	—
Natural Gas (Dry)	C	C	A	A	A	A	C	A	A
Natural Gas (Wet)	—	—	—	A	A	A	—	A	A
Navee	—	—	—	C	C	—	—	—	—
Neet's Foot Oil	X	X	A	A	A	—	B	—	—
Neohexane	X	X	A	A	A	—	—	X	—
Neon	A	A	A	A	A	A	A	—	—
Neosol	A	—	C	A	A	—	—	—	—
Neutral Oil	—	—	—	A	A	A	—	—	A
Neu-Tri	X	X	A	X	X	C	—	X	—
Neville Acid	X	X	A	C	C	—	B	—	—
Nevoll	X	X	B	C	C	—	—	—	—
Nickel Acetate	A	X	C	B	B	A	A	A	—
Nickel Ammonium Sulphate	—	—	A	—	—	A	—	—	—
Nickel Chloride	A	A	A	A	A	A	A	A	A
Nickel Nitrate	A	A	A	A	A	A	A	A	A
Nickel Plating Soln.	A	—	—	B	B	—	—	—	A
Nickel Salts	A	A	A	A	A	A	A	A	A
Nickel Sulfate	B	B	A	A	A	A	A	A	A
Nickelous Sulfate	A	A	A	A	A	A	A	A	—
Nicotine Bentonite	—	—	C	A	A	—	—	—	—
Nicotine Salts	—	—	—	A	A	—	—	—	A
Nicotine Sulfate	A	A	C	A	A	A	—	A	A
Niter - Potassium Nitrate	A	A	A	A	A	A	A	A	—
Niter - Sodium Nitrate	B	—	A	C	C	A	B	A	—
Niter Cake	A	A	A	A	A	A	A	A	—
Nitrana 2 & 3	B	—	C	B	B	B	B	B	—
Nitratine	B	—	A	C	C	B	B	B	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Nitration Benzol	—	—	—	—	—	—	—	—	A
Nitric Acid — 10%, 7.5 BE.	X	X	A	X	X	B	B	B	A
Nitric Acid — 25%	X	X	A	X	X	C	B	A	A
Nitric Acid — 35%, 2610 B	X	X	A	X	X	X	C	A	A
Nitric Acid — 50%	X	X	A	X	X	X	X	A	A
Nitric Acid — 69%, 42.1 BE.	X	X	B	X	X	X	X	B	A
Nitric Acid — 86%, 46.5 BE.	X	X	B	X	X	X	X	—	A
Nitric Acid, Conc.	X	X	B	X	X	X	X	B	A
Nitric Acid, Crude	X	X	A	X	X	X	—	C	A
Nitric Acid, Dilute	X	X	A	X	X	B	A	A	A
Nitric Acid — Red Fuming	X	X	B	X	X	X	X	X	X
Nitrobenzene	X	—	A	X	X	X	C	X	A
Nitrobenzine	—	—	A	—	—	X	C	X	A
Nitrocalcite	A	A	A	A	A	A	A	A	—
Nitrocarbol	A	—	C	X	X	C	A	C	—
Nitroethane	B	—	C	X	X	C	B	B	—
Nitrogen	A	—	A	A	A	B	—	—	—
Nitrogen Fertilizer Soln.	A	—	A	B	B	A	—	—	—
Nitrogen Tetroxide	X	X	C	X	X	X	C	X	—
Nitroglycerine	—	—	—	—	—	C	—	—	A
Nitrohydrochloric Acid	X	X	A	X	X	X	C	B	—
Nitromethane	X	C	X	X	X	C	C	B	—
Nitromuriatic Acid	X	X	A	X	X	X	C	—	A
Nitrooctane	—	—	—	—	—	C	—	—	A
1-Nitropropane	X	—	C	X	X	C	A	—	A
Nitrous Acid	—	—	—	—	—	—	—	A	A
Nitrous Monoxide	A	A	A	A	A	—	—	A	—
Nitrous Oxide	A	—	A	A	B	B	—	—	A
Nitrosyl Chloride	—	—	—	—	—	—	—	—	A
Nitroxanthic Acid	C	—	A	C	C	C	B	A	—
Nonanoic Acid	X	—	—	A	A	—	—	X	—
Nonenes	X	—	—	A	A	—	—	X	—
Norge Niter	A	A	A	A	A	A	A	A	—
Norge Saltpeter	A	A	A	A	A	A	A	A	—
Norway Saltpeter	A	A	A	A	A	A	A	A	—
Norwegian Saltpeter	A	A	A	A	A	A	A	A	—
N.P.N.	—	—	—	—	—	—	—	—	—
O-A-54B-A	B	A	B	A	A	B	A	B	—
O-T-634-b	X	X	A	C	B	X	X	X	—
Oakite Alkaline Materials	A	—	—	B	C	A	—	—	—
Oakite — O.C. 31 & 32	C	—	—	—	—	C	—	—	—
Oakite — O.C. 33 & 34	X	—	—	—	—	X	—	—	—
Oakite — O.C. 36, 84H, 84M	C	—	—	—	—	C	—	—	—
Oakite — O.C. 85	X	—	—	—	—	X	—	—	—
Oakite — O.C. 88	X	—	—	—	—	C	—	—	—
Oakite — O.C. 131	C	—	—	—	—	C	—	—	—
Oakite — Crysoat FH Rinse	X	—	—	—	—	X	—	—	—
Oakite-O Drycid & O.F.M.184	C	—	—	—	—	C	—	—	—
Oakite — O Stripper S.A.	X	—	—	—	—	X	—	—	—
Oakite Solvent Materials	X	—	—	X	X	X	—	—	—
Octachlorotoluene	X	X	A	X	X	X	X	X	—
Octadecane	X	X	A	A	A	B	X	B	—
Octadecanoic Acid	X	X	B	A	A	B	B	C	—
Octadecatrienoic Acid	X	—	—	B	B	X	—	—	—
Octafluorocyclobutane	X	—	—	X	X	X	—	—	—
Octane	X	X	A	A	A	—	—	X	A
n-Octane	X	X	A	A	A	—	X	X	—
Octanol	X	—	B	A	A	A	X	B	—
2-Octanone	X	X	X	X	X	—	—	X	—
n-Octene-2	—	—	A	—	—	C	—	—	—
Octoic Acid	C	—	—	C	C	—	—	B	A
Octyl Acetate	—	X	X	X	X	—	—	A	—
Octyl Alcohol	B	B	B	A	A	B	A	A	—
n-Octyl Alcohol	B	B	B	A	A	B	X	A	—
Octyl Aldehyde	X	X	X	X	X	—	—	X	A
Octyl Amine	C	—	X	C	C	—	—	C	—
Octyl Carbinol	A	—	B	A	A	—	—	A	—
Octylene Glycol	A	—	A	A	A	—	—	A	—
Octylic Acid	C	—	—	C	C	—	—	B	—
Octylic Alcohol	B	—	B	A	A	B	A	A	—
Oil of Acetone	B	—	X	X	X	C	A	A	—
Oil of Bitter Almonds (Art.)	X	X	A	X	X	X	C	X	—
Oil of Hartshorn	X	X	A	A	A	—	—	X	—
Oil of Mirbane	X	X	A	X	X	X	C	X	A
Oil of Palma Christi	X	—	A	A	A	A	C	B	A
Oil of Turpentine	X	X	A	A	A	C	X	X	—
Oil of Vitriol	X	X	A	X	X	X	C	C	—
Okonite	A	A	A	A	A	—	—	A	—
Olefiant Gas	—	—	A	A	A	—	C	A	—
Oleic Acid	X	X	A	A	A	C	B	B	A
Olein	X	X	—	B	B	C	—	—	—
Oleum	X	X	B	X	X	B	—	—	—
Oleum Lini	X	X	A	A	A	X	—	—	—
Oleum Spirits	X	X	A	C	C	X	—	—	A
Olive Oil	X	X	A	A	A	X	—	—	—
Oronite 8200, 8515	X	X	A	B	B	A	A	X	A
Orthoboric Acid	A	A	A	A	A	X	—	—	—
Orthochloroethyl benzene	X	X	A	X	X	X	X	X	—
Orthodichlorobenzene	X	X	A	X	X	X	—	—	—
Orthodichlorobenzol	X	X	A	X	X	X	—	—	—
Ortho-hydroxybenzoic Acid	C	—	—	X	X	X	—	—	—
Orthoxylene	X	X	A	X	X	—	—	—	—
OS 45 Type III	X	X	A	B	B	A	A	X	—
OS 45 Type IV	X	X	A	B	B	A	A	X	—
OS 70	X	X	A	B	B	A	A	X	—
Oxalic Acid	B	B	C	C	C	B	C	A	B
Oxyethylene Succinic Acid	A	—	—	A	C	C	—	—	—
Oxygen — Cold	B	—	A	C	C	B	—	—	—
Oxygen — 250-400°F	X	X	B	C	X	X	C	X	—
Oxymethylene — 40%	C	—	—	C	C	X	—	—	—
Oxymuriate of Tin	A	A	A	A	A	A	B	B	A
Ozone	X	X	A	A	A	A	X	X	—
P-D-680	X	X	A	A	A	X	C	C	—
P-S-661b	X	X	A	A	A	X	—	—	—
Paint Thinner Duco	X	X	B	A	A	C	—	—	—
Painter's Naptha	X	X	—	X	X	X	—	—	—
Paint Oil	—	—	—	A	A	A	—	—	—
Palm Oil	X	X	A	A	A	A	C	B	A
Palmitic Acid	C	—	A	A	A	A	—	—	—
Paper Maker's Alum	A	A	A	A	A	A	A	A	—
Para San 10%	A	A	C	B	B	A	—	—	A
Paradichlorobenzene	X	X	A	X	X	X	X	X	—
Paradichlorobenzine	X	X	A	X	X	X	X	X	—
Paradichlorobenzol	X	X	A	X	X	X	X	X	—
Paradihydroxybenzene	C	—	—	X	X	X	—	—	—
Paraffins	X	X	A	A	A	A	—	—	—
Paraform	X	X	C	B	B	B	—	—	—
Paraformaldehyde	X	X	C	B	B	B	—	—	A
Paraldehyde	C	—	X	C	C	X	—	—	—
Par-al-ketone	X	X	X	X	X	X	—	—	—
Paraxylene	X	X	A	C	C	X	X	X	—
Paris Green & Lime 37%	—	—	A	A	A	A	A	A	—
Parker O Lube	X	B	A	A	A	A	A	A	—
Patent Alum	A	A	A	A	A	A	A	A	—
Peanut Oil	X	X	A	A	A	A	B	A	—
Pear Alum	A	—	—	A	A	A	—	—	—
Pear Oil	C	—	X	X	X	X	A	B	—
Pearl Ash	A	A	A	A	A	A	—	—	—
Pelargonic Acid	—	—	—	—	—	—	—	—	—
Pelargonic Acid	X	—	—	A	A	—	—	—	A
Pentachlorodiphenyl	X	—	—	X	X	X	X	—	—
Pentachlorodiphenyl oxide	X	—	—	X	X	X	X	—	—
Pentachloroethane	X	X	A	X	X	X	—	—	—
Pentachloroethylbenzene	X	X	—	X	X	X	—	—	—
Pentachlorophenol	X	X	A	X	X	X	X	—	A
Pentachlorophenylbenzoate	X	—	—	X	X	X	—	—	—
Pentachlorodiphenyl Ketone	X	X	—	X	X	X	—	—	—
Pentahydroxy Hexoic Acid	X	—	—	C	C	X	—	—	—
Pentamethylene Amine	X	X	C	X	X	X	X	X	X
Pentane	X	X	A	A	A	A	B	X	A
n-Pentane	X	C	A	A	A	A	A	X	—
n-Pentane, 2 Methyl	X	X	A	A	A	A	B	X	—
n-Pentane, 2-4 Dimethyl	X	X	A	A	A	A	B	X	—
n-Pentane, 2 Methyl, 3 Methyl	—	—	—	—	—	—	—	—	—
n-Pentane, 3 Methyl	X	X	A	A	A	A	B	X	—
2, 4-Pentane Dione	C	—	X	X	X	X	X	A	—
Pentanoic Acid	A	—	—	X	X	X	A	A	—
Pentanol	A	A	A	A	A	—	—	A	—
Pentanone	X	X	X	X	X	X	X	A	—
Pentatosol	X	A	A	A	A	—	—	A	—
Pentasodium Triphosphate	X	—	—	X	X	X	X	—	—
Pentene	X	X	—	B	B	A	—	—	—
Pentene-2, 4-Methyl	—	—	A	—	—	A	—	—	—
Pentyl Amine	C	—	X	C	C	X	X	C	—
Pentylloxypentane	X	X	—	C	C	X	—	—	—
Perchloric Acid	A	—	A	X	X	A	B	A	A
Perchloroethylene	X	X	—	X	X	X	X	X	—
Perchloromethane	X	—	—	X	X	X	—	—	—
Permachlor	—	—	C	X	X	—	—	—	—
Peroxide — 3%	B	—	A	B	B	B	B	B	A

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Peroxide — 10%	B	—	A	C	C	C	B	B	A
Peroxide — 30%	C	—	A	C	C	X	B	C	A
Peroxide — 90%	X	—	A	X	X	X	C	C	A
Peroxydol	B	—	A	B	B	B	A	A	—
Peroxyhydrate	A	A	—	A	A	A	—	—	—
Peru Saltpeter	B	—	A	C	C	B	A	A	—
Petrol	X	X	A	A	A	B	X	X	—
Petrolatum	X	X	—	A	A	B	—	B	A
Petrolene	X	X	A	A	A	B	X	B	—
Petroleum—Below 250°F	X	X	A	A	A	B	X	C	X
Petroleum—Above 250°F	X	X	B	C	C	X	X	X	X
Petroleum—Crude	X	X	A	A	A	C	X	X	X
Petroleum—Ether	X	X	A	A	A	B	X	X	—
Petroleum Naptha	X	X	A	A	A	B	X	X	—
Petroleum Oils	X	X	A	A	A	B	—	X	—
Petroleum Pitch	X	X	A	A	A	B	X	X	—
Petroleum Spirits	X	X	A	A	A	B	X	X	—
Petroleum Thinner	X	—	—	X	X	X	—	—	—
Phene	X	X	A	X	X	X	X	X	—
Phenetole (Phenetol)	X	X	C	X	X	X	X	X	—
Phenic Acid	X	X	A	X	X	C	C	C	—
Phenmethyol	C	—	A	X	X	C	C	B	—
Phenol	X	X	A	X	X	X	C	X	A
Phenol 70%, 30% Water	X	X	A	X	X	X	X	X	—
Phenol Polysiloxane	X	X	—	A	A	X	—	—	—
Phenol Sulfonic Acid	X	X	X	X	X	—	—	X	—
Phenol Trinitrate	X	X	—	X	X	X	—	—	—
Phenolates	X	—	B	X	X	X	—	X	—
Phenoxide	X	—	B	X	X	X	—	—	—
Phenoxin	X	X	A	C	C	X	X	X	—
Phenoxybenzene	X	X	A	X	X	X	X	C	—
Phenyl Acetate	C	—	X	X	X	X	B	C	—
Phenyl Aldehyde	X	X	X	X	X	X	B	X	—
Phenyl Amine	X	X	A	X	X	C	B	C	—
Phenyl Benzene	X	X	A	X	X	X	X	X	—
Phenyl Bromide	X	X	B	X	X	X	X	X	—
Phenyl Carbinol	C	—	A	X	X	C	X	B	—
Phenyl Chloride	X	X	A	X	X	X	X	X	—
Phenyl Ethane	X	X	A	X	X	X	X	X	—
Phenyl Ether	X	X	A	X	X	X	X	C	—
Phenyl Ethyl Ether	X	X	X	X	X	X	X	X	—
Phenyl Formic Acid	B	—	A	X	X	A	B	B	—
Phenyl Hydrazine	A	B	A	X	X	X	X	X	—
Phenyl Hydride	X	X	A	X	X	X	X	X	—
Phenyl Hydroxide	X	X	A	X	X	C	C	C	—
Phenyl Methane	X	X	A	C	C	X	X	X	—
Phenyl Methyl Ketone	C	—	X	X	X	X	A	X	—
Phenylic Acid	X	X	A	X	X	C	C	C	—
Phorone	X	X	A	X	X	X	C	X	—
Phosphate Esters	X	X	A	X	X	X	C	X	—
Phospholeum	X	—	—	—	—	X	—	—	—
Phosphoric Acid, 10%	A	C	A	A	C	B	A	A	A
Phosphoric Acid, 20%	B	X	A	C	X	B	A	A	A
Phosphoric Acid, 50%	C	X	A	X	X	B	B	A	A
Phosphoric Acid, 85%	C	X	A	X	X	B	B	B	A
Phosphoric Acid, Conc.	C	X	A	C	X	B	C	B	A
Phosphoric Acid, Crude	C	—	A	C	C	B	C	A	A
Phosphoric Acid, 3M	B	B	A	X	X	C	A	A	A
Phosphorous Oxychloride	X	—	—	—	—	X	—	X	—
Phosphorous Trichloride Acid	X	—	A	X	X	X	A	X	—
Photogen	X	—	A	A	A	C	X	C	—
Pickle Alum	A	—	A	A	A	A	A	A	—
Pickling Solution	C	—	B	—	—	C	C	A	A
Picric Acid (Molten)	C	—	A	C	C	C	A	X	A
Picric Acid (Water Solution)	A	—	A	B	B	C	B	A	A
Picronitric Acid	C	—	A	C	C	C	B	A	—
Pimelic Ketone	X	X	—	X	X	—	—	—	—
Pinacol (Pinacolin)	A	A	A	A	A	A	C	A	—
Pine Oil	X	X	A	B	B	X	X	X	A
Pinene	X	X	A	B	B	X	X	X	—
Piperidine	X	X	C	X	X	X	X	X	—
Pitch (Pine Tar)	X	X	A	A	A	B	X	B	—
Plating Solution—Antimony	B	—	—	—	—	—	—	—	—
Plating Solution—Arsenic	B	—	—	—	—	—	—	—	—
Plating Solution—Brass	B	—	—	—	—	—	—	—	—
Plating Solution—Cadmium	A	—	—	B	B	B	—	—	—
Plating Solution—Chrome	—	—	A	—	—	—	A	C	—
Plating Solution—Copper	B	—	—	—	—	—	—	—	—
Plating Solution—Gold	B	—	—	—	—	—	—	—	—
Plating Solution—Iron	B	—	—	A	A	—	—	—	—
Plating Solution—Lead	A	—	—	B	B	B	—	—	—
Plating Solution—Nickel	B	—	—	—	—	—	—	—	—
Plating Solution—Platinum	—	—	—	—	—	—	—	—	—
Plating Solution—Silver	B	—	—	—	—	—	—	—	—
Plating Solution—Tin	—	—	—	—	—	—	—	—	—
Plating Solution—Zinc	B	—	—	—	—	—	—	—	—
Polyethylene Glycol	A	—	A	A	A	X	X	A	—
Polyformaldehyde	X	X	—	X	X	—	B	A	—
Polyoxymethylene	X	X	C	B	B	—	—	—	—
Polypropylene Glycol	A	A	A	A	A	—	—	—	—
Polyvinylacetate Emulsion	—	—	—	—	—	B	A	B	—
Potash	B	B	C	C	C	B	B	A	—
Potash—Alum	A	—	A	A	A	A	A	A	—
Potash—Caustic	B	—	C	C	C	B	B	A	—
Potassa	B	—	C	C	C	B	B	A	—
Potassium Acetate	B	—	B	B	B	B	A	B	—
Potassium Alum	A	—	A	A	A	A	A	A	—
Potassium Aluminum Sulfate	A	—	A	A	A	A	A	A	—
Potassium Bicarbonate	A	—	A	A	A	A	—	A	A
Potassium Bichromate	X	—	A	A	A	B	A	B	—
Potassium Bisulfate	A	—	A	A	A	A	—	A	—
Potassium Bisulfite	A	—	A	A	A	A	A	A	—
Potassium Borates	A	—	A	A	A	A	A	A	A
Potassium Bromide	A	—	A	A	A	A	A	A	A
Potassium Carbonate	A	—	A	A	A	A	A	A	A
Potassium Chlorate	A	—	A	A	A	A	A	A	—
Potassium Chloride	A	—	A	A	A	A	A	A	—
Potassium Chromate	—	—	—	—	—	—	—	C	—
Potassium Chromic Sulfate	A	—	—	A	A	A	A	—	—
Potassium Cupro Cyanide	A	—	A	A	A	A	A	A	—
Potassium Cyanide	A	—	A	A	A	A	A	A	A
Potassium Dichromate	X	—	A	A	A	A	A	B	A
Potassium Hydrate	B	—	C	C	C	B	B	A	—
Potassium Hydroxide	B	—	C	C	C	B	B	A	A
Potassium Hypochlorite	C	—	—	X	X	C	—	B	—
Potassium Iodide	—	—	A	A	A	A	A	A	—
Potassium Murate	A	—	A	A	A	A	A	A	A
Potassium Nitrate	A	—	A	A	A	A	A	A	A
Potassium Nitrite	A	—	A	A	A	A	A	A	—
Potassium Oxide	A	—	—	B	B	A	—	—	—
Potassium Permanganate	A	—	A	C	C	C	A	B	A
Potassium Phosphate	—	—	A	—	—	A	A	A	—
Potassium Silicate	A	—	A	A	A	A	A	A	—
Potassium Sulfate	A	—	A	A	A	A	A	A	A
Potassium Sulfide	A	—	A	A	A	A	A	A	A
Potassium Sulfite	A	—	A	A	A	A	A	A	A
Potassium Thiosulfate	A	—	A	A	A	A	A	A	—
Potato Oil	A	—	A	A	A	A	A	A	—
Potato Spirit	A	—	A	A	A	A	A	A	—
Prestone	A	—	A	A	A	A	A	A	—
Producer Gas	C	—	A	A	A	B	B	C	A
PRL Hi-Temp. Hydr. Oil	X	X	A	B	B	B	X	X	—
Propane	X	—	A	A	A	B	X	B	A
Propanediamine	B	—	—	B	B	—	—	C	—
Propanediol	A	—	A	A	A	—	A	A	—
Propanetriol	A	—	A	A	A	A	A	A	—
Propanol	A	—	A	B	B	A	B	A	—
2-Propanone	B	—	X	X	X	C	B	A	—
Propanepropionitrile	X	X	A	A	A	B	X	B	—
Propenal	B	—	A	A	B	—	—	B	—
Propene	X	—	A	X	X	X	X	X	—
Propene Oxide	—	—	—	—	—	—	—	—	—
Propenol	A	—	B	A	A	X	A	A	—
Propenyl Hydrate	A	—	A	A	A	A	A	A	—
Propenylanisole	X	—	B	X	X	—	—	X	—
Propionic Acid	A	—	—	X	X	X	X	—	—
Propionitrile	A	—	X	X	X	X	B	—	—
Propyl Acetate	X	—	X	X	X	X	C	C	A
n-Propyl Acetate	X	—	X	X	X	X	X	—	—
Propyl Acetone	X	—	X	X	X	X	—	—	—
Propyl Alcohol	A	—	A	B	B	A	B	A	A
Propyl Aldehyde	C	—	X	X	X	—	—	X	—
Propyl Chloride	X	—	B	X	X	—	—	X	—
Propyl Cyanide	X	—	—	X	X	X	A	—	—
Propyl Ethylene	X	—	—	C	C	A	—	—	—
Propyl Formic Acid	X	—	—	X	X	X	—	—	—
Propyl Nitrate	—	—	C	—	—	—	B	C	—
Propylene	X	—	A	X	X	X	X	X	—
Propylene Aldehyde	X	—	X	X	X	X	X	X	—
Propylene Chloride	X	—	B	X	X	X	X	X	—



## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Propylene Diamine	B	—	—	B	B	—	—	C	—
Propylene Dichloride	X	—	B	X	X	—	—	X	A
Propylene Glycol	A	—	A	A	A	—	—	A	—
Propylene Oxide	—	—	—	—	—	X	B	X	—
Protochloride	A	—	—	—	—	B	—	—	—
Prussic Acid	B	—	A	B	B	C	B	A	—
Purin Wood Plnt Spry 10%	X	—	C	X	X	—	—	—	A
Purple Salt	X	—	—	B	B	X	—	—	—
Pyracetic Acid	C	—	A	C	C	C	B	B	—
Pyranol	X	—	A	A	A	X	X	X	—
Pyranol 1467	—	—	—	A	A	C	X	—	A
Pyranol 1476	—	—	A	A	A	B	X	—	A
Pydraul F-9	X	X	—	X	X	X	X	X	A
Pydraul 10E, 29ELT, 30E, 50E, 65E, 90E	X	X	A	X	X	X	B	X	A
Pydraul 115E	X	X	A	X	X	X	B	X	A
Pydraul 230E, 312C, 540C	X	X	A	X	X	X	X	X	A
Pyrene	X	—	A	C	C	X	X	X	—
Pyrex	X	—	A	C	C	X	X	X	—
Pyridine	X	—	C	X	X	X	B	X	A
Pyridine Oil	—	—	X	X	X	—	—	—	—
Pyrite	A	—	A	A	A	—	—	A	—
Pyroacetic Ether	X	—	—	X	X	—	—	—	—
Pyroacetic Spirit	B	—	X	X	X	C	A	B	—
Pyrogallolcarboxylic Acid	A	—	A	X	X	C	B	B	—
Pyrogard 42, 43, 53, 55	X	X	A	X	X	X	A	X	—
Pyrogard C, D	X	X	A	A	A	B	X	X	—
Pyrolineous Acid	X	X	X	X	X	X	B	X	—
Pyrolineous Acid	—	—	—	—	—	—	—	B	A
Pyrolineous Spirit	A	—	C	A	A	A	B	A	—
Pyrolube	X	X	A	X	X	X	B	X	—
Pyromuccic Aldehyde	X	—	—	X	X	X	—	—	—
Pyroxlic Spirit	A	—	C	A	A	A	B	A	—
Pyrrrole	C	—	C	X	X	X	C	—	—
Quaternary Ammonium Salt	A	—	A	A	A	—	—	A	—
Quiklime	A	—	—	A	A	A	A	A	—
Quicksilver	A	—	A	A	A	A	A	A	—
Quinol	B	—	C	C	C	X	—	—	—
Quenching Oil	—	—	—	A	A	B	—	B	A
Radiation	B	—	B	B	B	B	C	A	—
Rape Oil	X	—	A	B	B	B	A	B	—
Rapeseed Oil	X	—	A	B	B	B	A	B	—
Raw Linseed Oil	X	—	A	A	A	B	B	B	—
Red Line 100	X	X	A	A	A	B	X	B	—
Red Oil	X	—	—	A	A	C	B	B	—
Red Potassium Chromate	X	—	A	B	B	X	—	—	—
Retinol	—	—	A	A	A	A	—	B	—
Rhigolene	X	—	A	A	A	A	X	B	—
Richfield "A" 100%	X	—	C	C	C	X	X	X	A
Richfield "D" 33%	X	—	C	B	B	X	X	—	A
Ricinus Oil (Racine)	B	—	A	A	A	A	B	A	—
Rock Salt	A	—	A	B	B	A	A	A	—
Roman Vitroil	C	—	A	A	A	A	A	A	—
Rosin Oil	—	—	A	A	A	A	—	B	A
Rotenone & H2O	A	—	A	A	A	A	A	—	—
Rum	A	—	B	A	A	A	A	A	—
RJ-1 (MIL-F-25558), RP-1 (MIL-R-2557)	X	X	A	A	A	B	X	B	—
Saccharose	X	—	A	A	A	A	A	A	—
Saccharum-Amylaceum	A	—	A	B	B	B	A	A	—
Saccharum Solutions	A	—	A	A	A	A	A	A	—
SAE #10 Oil	X	—	A	A	A	B	C	C	—
Sal Ammoniac	A	—	A	A	A	A	A	A	—
Sal Chalybdis	A	—	A	A	A	A	A	A	—
Sal Soda	A	—	A	A	A	A	A	A	—
Sal Tartari	A	—	A	A	A	A	A	A	—
Sal Volatile	A	—	A	X	X	A	A	B	—
Salicylic Acid	A	—	A	X	X	X	A	A	—
Salmiak (Salmiac)	A	—	A	A	A	A	A	A	—
Saliter (Salitre)	B	—	A	C	C	A	B	A	—
Salt	A	—	A	A	A	A	A	A	—
Salt Cake	A	—	A	A	A	A	A	A	—
Salt of Lemery	A	—	A	A	A	A	A	A	—
Salt of Tartar	A	—	A	A	A	A	A	A	—
Salt of Vitroil	A	—	A	A	A	A	A	A	—
Salt Water	A	—	A	B	B	B	A	A	A
Salt-peter-Ammon. Nitrate	A	—	A	A	A	A	A	A	—
Salt-peter-Calc. Nitrate	A	—	A	A	A	A	A	A	—
Salt-peter-Potas. Nitrate	A	—	A	A	A	A	A	A	—
Salt-peter-Sodium Nitrate	B	—	A	C	C	B	B	A	—
Sand Acid	A	—	A	C	B	B	B	A	—
Sanitizer 160 (Monsanto)	X	—	B	—	—	—	A	—	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
SantoSaf 300	X	X	A	X	X	X	C	X	—
Sea Salt	A	—	A	A	A	A	A	A	—
Sea Water	—	—	A	B	B	A	A	A	—
Secondary Butyl Acetate	—	—	—	—	—	—	—	—	A
Seed Oil	X	—	A	A	A	A	A	B	—
Separan NP-10	A	—	—	—	—	—	—	—	—
Sewage	C	—	A	A	A	A	B	A	—
Sewarage	C	—	A	A	A	A	B	A	—
Shale Naptha	X	—	A	A	A	B	X	X	—
Shell Alvania Grease #2	X	X	A	A	A	B	X	X	—
Shell Carnea 19, 29	X	X	A	A	A	X	X	X	—
Shell Diala, Iris 905	X	X	A	A	A	B	X	X	—
Shell Iris 3XF Mine Fluid	X	X	A	A	A	B	X	B	—
Shell Iris Tellus #27, #33	X	X	A	A	A	B	X	X	—
Shell Iris UMF	X	X	A	A	A	B	X	X	—
Shell Lo Hydrax 27, 29	X	X	A	A	A	B	X	X	—
Shell Macoma	X	X	A	A	A	B	X	X	—
Shell DD	X	X	C	X	X	X	X	X	A
Sherwood Oil	X	—	A	A	A	X	X	X	—
Sieman's Gas	C	—	A	A	A	B	C	B	—
Silent Spirit	A	—	B	A	A	B	A	A	—
Silicate Esters	X	—	A	A	A	B	X	A	—
Silicate of Soda	A	—	A	A	A	B	A	A	—
Silicofluoric Acid	A	—	A	B	B	A	B	A	—
Silicone Greases	B	—	A	A	A	A	A	A	—
Silicone Oils	C	—	A	A	A	C	A	A	A
Silver Cyanide	A	—	—	—	—	A	—	—	—
Silver Nitrate	A	—	A	B	B	A	A	A	—
Sinclair Opelene CX-EP-Lube	X	X	A	A	A	B	X	B	—
Skelly Solve B,C,E	—	—	C	—	—	A	—	—	—
Skydraul 500	X	—	C	X	X	X	B	X	—
Skydraul 7000	X	—	C	X	X	X	X	X	—
Skydraul Hydraulic Fluid	X	—	B	X	X	X	C	X	A
Slaked Lime	A	—	A	A	A	A	A	B	A
Soap Solutions	B	—	A	A	A	B	A	A	A
Socony Mobil Type A	X	X	A	A	A	B	X	X	—
Socony Vacuum AMV-AC 781	X	X	A	A	A	B	X	X	—
Socony Vacuum PD-959B	X	X	A	A	A	B	X	X	—
Soda	A	—	A	A	A	A	A	A	—
Soda Alum	A	—	A	A	A	A	A	A	—
Soda Ash	A	—	A	A	A	A	A	A	A
Soda — Baking	A	—	A	A	A	A	A	A	—
Soda — Caustic	A	—	B	B	B	B	A	B	—
Soda — Lime	A	—	B	B	B	B	A	B	—
Soda — Niter (Nitrate)	B	—	A	C	C	B	A	A	—
Soda — Salt-peter	B	—	A	C	C	B	A	A	—
Soda — Washing	B	—	A	C	C	B	A	A	—
Sodan	B	—	—	B	B	B	—	—	—
Sodium Acetate	C	—	X	C	C	B	A	A	A
Sodium Acid Carbonate	A	—	A	A	A	A	A	A	—
Sodium Acid Sulfate	A	—	—	B	B	A	—	—	—
Sodium Alum	A	—	A	A	A	A	—	—	—
Sodium Aluminate	A	—	A	A	A	A	—	—	—
Sodium Aluminum Sulfate	A	—	A	A	A	A	—	—	—
Sodium Arsenate	A	—	—	—	—	—	—	—	—
Sodium Benzoate	A	—	—	—	—	—	—	—	—
Sodium Bicarbonate	A	—	A	A	A	A	—	—	—
Sodium Bichromate	X	—	A	—	—	B	A	B	A
Sodium Bisulfate	A	—	A	A	A	A	A	A	—
Sodium Bisulfite	A	—	A	A	A	A	A	A	—
Sodium Bisulphate	A	—	A	A	A	A	A	A	A
Sodium Borate	A	—	A	A	A	A	A	A	—
Sodium Bromides	A	—	—	—	—	—	—	—	—
Sodium Carbonate	A	—	A	A	A	A	A	A	—
Sod. Carb.-Anhydrous	A	—	A	A	A	A	A	A	—
Sod. Carb.-Hydrated	A	—	A	A	A	A	A	A	—
Sodium Chlorate	A	—	A	A	A	A	B	A	—
Sodium Chloride	A	—	A	A	A	A	A	A	—
Sodium Chromate	—	—	—	—	—	—	—	C	—
Sodium Cyanide	A	—	A	A	A	A	A	A	A
Sodium Dichromate	X	—	—	—	—	B	A	B	A
Sodium Dimetaborate	A	—	A	B	B	B	A	A	—
Sodium Dioxide	B	—	A	B	B	B	B	A	—
Sodium Diphosphate	A	—	—	A	A	A	—	—	—
Sodium Disulfite	B	—	—	A	A	A	—	—	—
Sodium Fluoaluminate 10%	A	—	A	A	A	A	A	A	A
Sodium Fluoride	A	—	A	A	A	A	A	—	—
Sodium Hexmetaphosphate	A	—	—	B	B	B	B	B	—
Sodium Hydrate	A	—	B	C	C	C	B	B	—
Sodium Hydrochlorite	C	—	A	C	C	C	C	B	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Sodium Hydrogen Carbonate	A	—	A	A	A	A	A	A	—
Sodium Hydrogen Sulfate	A	—	A	A	A	A	A	A	—
Sodium Hydroxide	A	—	B	C	C	B	A	B	A
Sodium Hypochloride	C	—	A	X	X	C	C	A	A
Sodium Hypochloride — 5%	C	—	A	C	C	C	B	A	A
Sodium Hypochlorite — 20%	X	—	—	X	X	X	C	A	A
Sodium Hyposulfite	A	—	A	A	A	A	A	A	—
Sodium Iodine	—	—	A	—	—	—	—	—	—
Sod. Metabor. Perox.-Hydr.	A	—	—	A	A	—	—	—	—
Sodium Metaphosphate	A	—	A	B	B	C	A	B	A
Sodium Nitrate	B	—	A	C	C	B	A	A	A
Sodium Nitrite	—	—	A	—	—	—	—	—	—
Sodium Perborate	B	—	A	B	B	B	A	B	A
Sodium Peroxide	B	—	A	B	B	B	B	A	A
Sodium Phosphates	A	—	A	B	B	B	A	A	A
Sodium Pyroborate	A	—	A	B	B	A	A	A	—
Sodium Salts	A	—	A	—	—	A	—	A	A
Sodium Sesquicarbonate	A	—	—	A	A	A	—	—	—
Sodium Silicate Sulfate	A	—	—	A	A	A	—	—	—
Sodium Silicates	A	—	A	A	A	A	A	A	—
Sodium Stannic Chloride	A	—	—	B	B	X	—	—	—
Sodium Subulfite	A	—	A	A	A	A	A	A	—
Sodium Sulfates	A	—	A	A	A	A	A	A	—
Sodium Sulfide	A	—	A	A	A	A	A	A	—
Sodium Sulfites	A	—	A	A	A	A	A	A	—
Sodium Superoxide	B	—	A	B	B	B	B	A	—
Sodium Tetraborate	A	—	A	A	A	A	A	A	—
Sodium Thiosulfate	A	—	A	A	A	A	A	A	A
Sodium Triphosphates	A	—	—	A	A	A	—	—	—
Sodium Tripolyphosphate	A	—	—	A	A	A	—	—	—
Solene	X	—	A	A	A	B	X	X	—
Soluble Glass	A	—	A	A	A	A	A	A	—
Solvasol #1, 2, 3	—	—	C	A	A	—	—	—	—
Solvasol #73	—	—	C	C	C	—	—	—	—
Solvasol #74	—	—	C	X	X	—	—	—	—
Soya Oil (Soy Oil)	X	—	A	A	A	B	B	A	—
Soybean Oil	X	—	A	A	A	B	B	A	A
Spirit	X	—	B	A	A	A	A	A	—
Spirits of Turpentine	X	—	A	A	A	C	X	X	—
Spirits of Vinegar	B	—	C	C	C	A	X	B	—
Spirits of Wine	A	—	B	A	A	A	A	A	—
Spry	X	X	A	A	A	B	B	X	—
SR6 Fuel	X	X	A	B	B	X	X	X	—
SR10 Fuel	X	X	A	A	A	X	X	X	—
Standard Oil Mobil Lube GX90EP	X	X	A	A	A	B	X	B	—
Stannic Chloride	A	—	A	A	A	A	B	A	A
Stannic Sulfide	A	—	—	A	A	—	—	A	A
Stannous Chloride	A	—	A	A	A	A	B	A	A
Stannous Sulfide	A	—	—	A	A	—	—	A	—
Starch Syrup (Sugar)	B	—	A	B	B	B	A	A	—
Stauffer 7700	X	X	A	B	B	X	X	B	—
Steam, to 225°F	C	—	X	C	C	X	X	X	A
Steam, 225° to 300°F	X	—	X	X	X	X	X	C	A
Steam, over 300°F	X	—	X	X	X	X	C	X	A
Stearic Acid	X	—	A	A	A	B	B	C	A
Stoddard Solvent	X	—	A	—	A	C	X	X	A
Stripper S.A.	X	—	—	—	—	X	X	X	—
Styrene	X	—	A	X	X	X	X	X	A
Sublimed White Lead	B	—	—	B	B	A	—	—	—
Sucrose Solution	A	—	A	A	A	A	A	A	—
Sugar of Lead	B	—	X	B	B	A	A	A	—
Sug. Liq.-Cane, Beet & Maple	A	—	A	A	A	A	A	A	—
Sulfamic Acid	B	—	—	B	B	A	—	B	—
Sulfite Cellulose Liquors	B	—	A	A	A	A	B	A	—
Sulfite Liquors	B	—	A	A	A	A	B	A	—
Sulfuric Acid	X	—	X	X	X	—	—	C	A
Sulfur	C	—	—	B	B	—	A	A	A
Sulfur — 250°F	X	—	B	—	—	X	A	C	X
Sulfur Chloride	X	—	A	C	C	C	X	A	A
Sulfur Dioxide	C	—	A	C	C	C	A	A	A
Sulfur Diox. -1% at 100°F	—	—	A	—	—	A	A	—	—
Sulfur Dioxide — Liquid	B	—	A	X	X	B	A	A	—
Sulfur Hexafluoride	X	—	A	B	B	A	A	A	—
Sulfur Monochloride	X	—	A	C	C	C	X	A	—
Sulfur Subchloride	X	—	A	C	C	C	X	A	—
Sulfur Trioxide, Dry	X	—	A	C	C	C	C	B	A
Sulfurated Lime	C	—	A	X	X	C	A	C	A
Sulfuretted Hydrogen	A	—	B	X	B	A	A	A	—
Sulfuric Acid — 10%, 98E	A	—	A	B	B	A	A	A	—
Sulfuric Acid — 25%	B	—	A	C	C	B	A	A	A

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Sulfuric Acid — 50%, 41BE	B	—	A	C	C	B	B	A	A
Sulfuric Acid — 60%, 48BE	C	—	A	X	X	C	B	A	A
Sulfuric Acid — 75%, 58BE	X	—	A	X	X	C	C	B	A
Sulfuric Acid — 95%, 66BE	X	—	A	X	X	C	C	C	A
Sulfuric Acid — 100%	X	—	B	X	X	X	X	C	X
Sulfuric Acid — conc.	X	—	A	X	X	X	C	C	X
Sulfuric Acid — Dilute	A	—	A	B	B	X	A	C	X
Sulfuric Acid — Fuming	X	—	B	X	X	X	X	C	X
Sulfuric Acid — Oleum	X	—	B	X	X	X	X	C	X
Sulfuric Ether	X	—	X	B	B	X	X	C	B
Sulfurous Acid — 10%	B	—	A	X	X	X	—	A	—
Sulfurous Acid — 10% to 75%	B	—	A	X	X	X	—	A	—
Sulfurous Acid — 100%	B	—	A	X	X	X	C	A	—
Sulfurous Acid Anhydride	C	—	A	C	C	C	C	—	—
Sulfurous Oxysulfide	X	—	—	X	X	X	—	—	—
Sulfite Liquors	B	—	A	A	A	A	B	A	—
Summer Oil	A	—	A	A	A	A	—	—	A
Sunoco SAE 10	X	X	A	A	A	A	X	B	—
Sunoco #3661	X	X	A	A	A	A	X	B	—
Sunoco All Purpose Grease	X	X	A	A	A	A	X	B	—
Sunsafe	X	X	A	A	A	B	X	B	—
Super Shell Gas	X	X	A	A	A	B	X	X	—
Superphosphoric Acid	—	—	—	—	—	—	—	—	—
Swan Finch EP Lube	X	X	A	A	A	X	X	X	—
Swan Finch Hypoid-90	X	X	B	A	A	B	X	X	—
Sweet Birch Oil	X	—	B	X	X	X	C	—	—
Sweet Oil	X	—	A	B	B	X	—	—	—
Syrup	A	—	—	A	A	A	—	A	—
TT-N-95a	X	X	A	A	A	C	X	C	—
TT-N-97B	X	X	A	B	B	C	C	C	—
TT-I-735b	A	A	A	A	A	B	A	B	—
TT-S-735 Type I	A	A	A	A	A	B	X	B	—
TT-S-735 Type II, III	X	X	A	A	A	C	X	C	—
TT-S-735 Type IV	X	X	A	A	A	A	X	A	—
TT-S-735 Type V, VI	X	X	A	A	A	B	X	B	—
TT-T-656b	X	X	X	X	X	X	A	X	—
Table Salt	A	—	A	A	A	A	X	A	—
Tall Oil	X	—	A	A	A	B	X	C	—
Tallol	X	—	A	A	A	B	X	C	—
Tallow	X	—	A	A	A	B	X	C	—
Tan	A	—	A	C	C	A	C	A	—
Tannic Acid	A	—	A	C	C	A	C	A	—
Tannin	A	—	A	C	C	A	C	A	—
Tanning Liquors	—	—	—	A	A	A	—	—	—
Tanning Solutions	B	—	—	A	A	A	—	—	—
Tar (Bituminous)	X	—	A	B	B	C	X	C	X
Tar (Camphor)	X	—	A	X	X	X	X	X	X
Tartaric Acid	A	—	A	B	B	C	X	A	—
Taxaphene 12%	X	—	—	B	B	C	—	—	—
T.C.A.	X	—	—	X	X	X	—	—	—
T.C.P.	C	—	B	X	X	C	A	C	—
T.E.A.	B	—	—	B	B	X	—	—	—
Terpene	X	—	A	C	C	X	X	X	—
Terpineol (Terpinolol)	X	—	A	C	C	X	B	X	—
Tertiary Butyl Alcohol	A	—	B	A	A	X	A	A	—
Tertiary Butyl Catechol	C	—	A	X	X	B	B	B	—
p-Tertiary Butyl Catechol	C	—	A	X	X	X	—	—	—
Tertiary Butyl Mercaptan	X	—	A	X	X	X	X	X	—
Tetrabromoethane	X	—	—	X	X	X	—	—	—
Tetrabromomethane	X	—	A	X	X	X	X	—	—
Tetrabutyl Titanate	B	—	A	B	B	A	B	A	—
Tetrachlorobenzene	X	—	—	X	X	—	—	—	—
Tetrachlorodifluoroethane	X	X	—	X	X	X	—	—	A
Tetrachlorodifluoromethane	X	X	—	X	X	X	—	—	—
Tetrachloroethane	X	X	A	X	X	X	X	X	—
Tetrachloroethylene	X	X	A	X	X	X	X	X	—
Tetrachloroethane	X	X	A	C	C	X	X	X	—
Tetrachloronaphthalene	X	—	B	X	X	—	—	—	A
Tetradecanol	A	—	B	A	A	—	—	—	—
Tetraethyl Lead	X	—	—	A	B	X	X	X	—
Tetraethyl Orthosilicate	X	—	—	A	A	A	—	—	—
Tetraethylene Glycol	A	—	A	A	A	—	—	—	—
Tetrafluoromethane	X	—	—	X	X	X	B	X	—
Tetrahydrofuran	X	—	X	X	X	C	C	X	—
Tetrahydronaphthalene	X	—	A	X	X	X	X	X	A
Tetralin	X	—	A	X	X	X	X	X	—
Tetrene	X	—	A	X	X	B	X	X	—
Tetrol	X	—	C	X	X	B	X	X	—
Texaco 3450 Gear Oil	X	X	A	B	B	X	X	X	—
Texaco Capella A & AA	X	X	A	B	B	X	X	X	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Texaco Meropa #3	X	X	A	X	X	B	X	X	—
Texaco Regal B	X	X	A	X	X	X	X	X	—
Texaco Uni-Temp Grease	X	X	A	A	A	B	X	X	—
Texamatic A Transmiss. Oil	X	X	A	A	A	B	X	X	—
Texamatic 1581 Fluid	X	X	A	A	A	B	X	X	—
Texamatic 3401 Fluid	X	X	A	A	A	B	X	X	—
Texamatic 3525,3528 Fluid	X	X	A	A	A	B	X	X	—
Texas 1500 Oil	X	X	A	A	A	B	X	X	—
Thenardite	A	—	A	A	A	A	A	A	—
Theta Octadecenoic Acid	X	—	—	X	X	B	—	—	—
T.H.F.	X	—	X	X	X	—	—	X	—
Thioethyl Alcohol	X	—	B	X	X	X	X	X	—
Thiokol TP90B	—	X	A	X	X	B	A	B	—
Thiokol TP95	—	X	A	X	X	B	A	B	—
Thionyl Chloride	X	—	A	X	X	X	X	—	—
Thiophene (Thiophen)	X	—	C	X	X	X	X	—	—
Tidewater Oil-Beedol	X	X	A	A	A	B	X	—	—
Tidew. Multigear 140EP Lube	X	X	A	A	A	B	X	B	—
Tin Bichloride	A	—	A	A	A	A	B	A	—
Tin Chloride	A	—	A	A	A	A	B	A	—
Tin Crystals	A	—	A	A	A	A	B	A	—
Tin Dichloride	A	—	A	A	A	A	B	A	—
Tin Protochloride	A	—	A	A	A	A	B	A	—
Tin Salts	A	—	A	A	A	A	B	A	—
Tin Tetrachloride	A	—	—	A	A	A	—	A	—
Tincal (Tinkal)	A	—	A	B	B	A	A	X	—
Titanium Tetrachloride	X	—	A	C	C	X	X	X	—
T.N.T.	X	—	C	X	X	A	X	B	—
Tollet Vinegar	B	—	A	C	C	X	A	B	—
Toluene	X	—	A	C	C	B	X	X	A
Toluene Diisocyanate	C	—	B	—	—	X	A	X	—
Toluidine (Toluidin)	X	—	B	X	X	—	—	X	A
Toluene Trichloride	—	—	—	X	X	—	—	—	—
Toluol (Toluole)	X	—	A	C	C	X	X	X	—
Toxaphene 12%	X	X	—	A	B	B	X	X	A
Transformer Oil (PCB)	X	—	A	B	B	C	X	B	A
Transmission Fluid Type A	X	—	A	A	A	C	X	C	—
Triacetin	B	—	C	A	A	A	A	B	—
Triammonium Phosphate	A	—	A	A	A	A	A	A	—
Triaryl Phosphate	X	—	A	X	X	C	A	C	—
Tributoxy Ethyl Phosphate	B	—	B	X	X	—	A	X	—
Tributyl Amine	B	—	—	B	B	—	—	C	—
Tributyl Mercaptan	X	—	A	X	X	X	X	C	—
Tributyl Phosphate	C	—	X	X	X	X	C	B	—
Trichloroacetic Acid	C	—	B	C	C	B	B	B	—
Trichlorobenzenes	X	—	B	X	X	X	—	X	A
Trichloroethane	X	—	A	X	X	X	X	X	—
Trichloroethylene	X	—	A	X	X	X	X	X	A
Trichloromethane	X	—	A	X	X	X	X	X	—
Trichloromonofluoromethane	X	—	—	X	X	X	—	—	—
Trichloropropane	X	—	B	X	X	—	—	X	A
Trichlorotoluene	—	—	—	X	X	—	—	—	—
Trichlorotrifluoroethane	X	—	—	X	X	X	—	—	A
Tricresyl Phosphate	C	—	B	X	X	C	A	C	—
Tridecamol	A	—	B	A	A	—	—	A	—
Triethanol Amine	B	—	B	B	B	B	B	A	A
Triethyl Aluminum	X	—	B	X	X	X	—	—	—
Triethyl Amine	B	—	—	A	A	B	—	—	—
Triethyl Borane	X	—	A	X	X	X	—	—	—
Triethylene Glycol	A	—	A	A	A	—	—	A	—
Trifluorovinyl Chloride	X	—	—	X	X	—	—	—	—
Trihydroxybenzoic Acid	A	—	A	X	X	—	B	B	—
Trihydroxyethyl Amine	C	—	—	B	B	C	—	—	—
Trimethyl Methane	X	—	A	A	A	—	—	X	—
Trimethyl Pentane	X	—	A	A	A	B	X	B	—
Trimethylene Glycol	A	—	A	A	A	—	A	A	—
Trinidad Pitch	X	—	A	A	A	B	X	A	—
Trinitrophenol	C	—	A	C	C	C	B	A	—
Trinitrotoluene	X	—	C	X	X	X	A	B	—
Triocetyl Phosphate	X	—	B	X	X	X	A	X	—
Triolein	X	—	—	B	B	C	—	—	—
Triphenyl Phosphate	X	—	C	X	X	—	—	C	—
Tripolyphosphate	X	—	—	X	X	X	—	—	—
Trisodium Phosphate	A	—	A	A	A	A	A	A	A
Tritylphosphate	C	—	B	X	X	C	A	C	—
Trotyl	X	—	C	X	X	A	X	B	—
Tung Oil	X	—	B	A	B	B	C	B	A
Turbine Oil	X	—	A	B	B	X	X	B	A
Turb.Oil #15 (MIL-L-7808A)	X	X	A	B	B	X	X	X	—
Turbo Oil #35	X	X	A	A	A	B	X	X	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Turpentine	X	—	A	A	A	C	X	X	A
Turpentine Substitute	X	—	—	X	X	X	X	X	—
Turps	X	—	A	A	A	X	X	X	—
Two Four D with 10% Fuel Oil	X	—	A	A	A	A	X	X	A
Type I Fuel (MIL-S-3136)	X	X	A	A	A	B	X	B	—
Type II Fuel (MIL-S-3136)	X	X	A	A	A	X	X	X	—
Type III Fuel (MIL-S-3136)	X	X	A	A	A	X	X	X	—
Ucon Hydrolube Oils	X	—	A	A	A	—	—	—	A
Ucon Lubricants LB-65, LB-135	A	A	A	A	A	A	A	A	A
Ucon Lubric. LB-285, LB-300	A	A	A	A	A	A	A	A	A
Ucon Lubric. LB-625, LB1145	A	A	A	A	A	A	A	A	A
Ucon Lubr. 50-HB55, HB100	A	A	A	A	A	A	A	A	A
Ucon Lubr. 50-HB260, HB660	—	A	A	A	A	A	A	A	A
Ucon Lubricant 50-HB5100	A	A	A	A	A	A	A	A	A
Ucon Oil LB-385, LB-400X	A	A	A	A	A	A	A	A	A
Ucon Oil 50 — HB-280X	A	—	X	C	C	A	A	A	A
U.D.M.H.	A	—	B	A	A	—	—	—	—
Undecanol	X	X	A	A	A	B	X	B	—
Univis 40, Hydraulic Fluid	X	X	A	A	A	B	X	X	—
Univolt #35, Mineral Oil	X	X	A	A	A	B	X	X	—
Unslaked Lime	A	—	—	—	—	A	A	A	—
Unsym. Dimethyl Hydrazine	A	—	X	C	C	B	B	B	—
Uran	B	—	—	B	B	B	—	—	A
Urea	A	—	—	B	B	B	—	—	A
VV-B-680	B	—	A	B	B	B	A	B	—
VV-G-632	X	—	A	A	A	A	X	A	—
VV-G-671c	X	—	A	A	A	A	X	A	—
VV-H-910	B	—	A	C	C	B	X	B	—
VV-I-530a	X	—	A	A	A	B	X	C	—
VV-K-211d	X	—	A	A	A	B	X	C	—
VV-K-220a	X	—	A	A	A	B	X	C	—
VV-L-751b	X	X	A	B	B	B	X	C	—
VV-L-800	X	X	A	A	A	B	X	C	—
VV-L-8206	X	X	A	A	A	B	X	C	—
VV-L-825a, Type I	X	X	A	A	A	B	X	C	—
VV-L-825a, Type II	X	X	A	A	A	B	X	C	—
VV-L-825a, Type III	X	X	A	B	B	B	X	C	—
VV-O-526	X	X	A	A	A	B	X	C	—
VV-P-216a	X	X	A	A	A	B	X	C	—
VV-P-236	X	X	A	B	B	B	X	C	—
Valeric Acid	A	—	—	X	X	X	A	—	—
Valerone	X	—	X	X	X	X	B	X	—
Varnish	X	—	A	B	B	C	X	C	A
Vegetable Oil	X	—	A	A	A	C	A	B	—
Versilube, F44, F50	C	—	A	A	A	C	A	A	—
Vinegar	B	—	A	C	C	B	A	B	A
Vinegar Naptha	X	—	X	X	X	B	A	B	—
Vinegar Salts	B	—	X	B	B	—	—	—	—
Vinyl Acetate	X	—	X	X	X	—	—	A	—
Vinyl Benzene	X	—	A	X	X	—	—	X	—
Vinyl Chloride	C	—	A	X	X	X	C	X	A
Vinyl Cyanide	B	—	X	X	X	B	X	X	—
Vinyl Ether	X	—	X	B	B	—	—	B	—
Vinyl Oxide	X	—	X	B	B	—	—	B	—
Vinyl Toluene	X	—	A	X	X	—	—	X	—
Vinyl Trichloride	X	—	A	X	X	X	—	X	—
Vinylene Chloride	X	—	B	X	X	X	—	X	—
Vitriol, Oil of	X	—	A	X	X	X	—	C	—
V.M. & P. Naptha	X	—	A	A	A	B	X	X	—
Wagner 218 Fluid	—	—	X	C	C	A	X	B	—
Walnut Oil	X	—	A	A	A	B	—	—	—
Washing Soda	A	—	A	A	A	A	A	A	—
Water — Acid Mine	A	—	A	A	A	C	A	A	—
Water-Distill., Lab.Ret.Cond.	A	—	A	A	A	C	A	A	—
Water, Fresh	A	—	A	A	A	B	—	—	—
Water, Seawater-River Water	A	—	A	B	B	B	A	A	—
Water Glass	A	—	A	A	A	B	A	—	—
Water Proofing Salt	A	—	—	B	B	A	—	—	—
Wax	X	—	—	A	A	A	X	A	—
Wax Distillate	—	—	—	A	A	B	—	—	A
Wemco — C	X	X	A	A	A	B	X	X	—
Whiskey	A	—	A	B	B	B	A	A	—
White Caustic	A	—	B	B	B	B	A	B	—
White Copperas	A	—	A	A	A	A	A	A	—
White Lead Sulfate	A	—	A	B	B	A	—	A	—
White Liquor	A	—	—	A	A	A	A	X	—
White Oil	X	—	A	A	A	B	X	X	—
White Pine Oil	X	—	A	B	B	X	X	X	—
White Vitriol	A	—	A	A	A	A	A	A	—
Whiting	A	—	A	A	A	A	A	A	—

## CHEMICAL SPECIFICATIONS

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
Wines	A	A	B	A	A	A	A	A	A
Wintergreen Oil	X	—	B	X	—	X	C	—	—
Wolmer Salts	—	A	—	—	—	—	—	—	—
Wood Alcohol	A	—	C	A	A	A	B	A	—
Wood Naptha	A	—	C	A	A	A	B	A	—
Wood Oil	X	X	B	A	A	B	C	B	—
Wood Spirit	A	—	C	A	A	B	B	A	—
Wood Tar	X	—	A	B	B	X	X	X	—
Wood Vinegar	A	—	A	C	C	C	B	A	—
Wood Oil	B	—	—	A	A	A	—	—	A
Xenon	A	A	A	A	A	A	A	A	—
Xylene	X	X	A	C	C	X	X	X	A
Xylidine's (Xylidin)	X	X	C	X	X	X	C	X	—
Xylidines. Mixed	X	X	C	X	X	X	A	—	—
Xylol	X	X	A	C	C	X	X	X	—
Xylol Stoddard Solvent	X	—	A	X	X	X	—	X	—
Zala	A	—	A	B	B	C	A	A	—
Zeolite (Zeolitic)	B	B	C	C	C	C	A	A	—
Zinc Acetate	A	X	C	C	C	C	A	B	—
Zinc Butter	B	—	A	B	B	B	A	A	—
Zinc Carbonate	A	—	A	A	B	—	—	A	—
Zinc Chloride	B	—	A	B	B	—	A	—	A
Zinc Chromate	—	A	—	—	—	—	—	C	—
Zinc Sulfate	A	—	A	A	A	A	A	A	A
Zinc Vitriol	A	—	A	A	A	A	A	A	—
Zirlite	A	—	C	A	A	A	A	B	—
MIL-A-6091	A	A	A	B	B	A	A	A	—
MIL-A-8243B	B	A	B	A	A	B	A	B	—
MIL-C-4339C	X	X	A	A	A	X	X	X	—
MIL-C-5545C	X	X	A	B	B	C	B	C	—
MIL-C-6529C	X	X	A	B	B	B	X	C	—
MIL-C-8188C	X	X	B	B	B	X	B	X	—
MIL-E-9500	A	A	A	A	A	A	A	A	—
MIL-F-5566	A	B	A	B	B	A	B	X	—
MIL-F-5602	X	X	A	A	A	B	X	B	—
MIL-F-7024A	X	X	A	A	A	X	X	B	—
MIL-F-16884	X	X	A	A	A	C	X	C	—
MIL-F-16929A	X	X	A	A	A	C	X	C	—
MIL-F-17111	X	X	A	A	A	B	X	X	—
MIL-F-19605	X	X	A	A	A	C	X	C	—
MIL-F-25172	X	X	A	A	A	C	X	C	—
MIL-F-25524A	X	X	A	A	A	C	X	C	—
MIL-F-25558B	X	X	A	A	A	B	X	B	—
MIL-F-25576C	X	X	A	A	A	C	X	C	—
MIL-F-25656B	X	X	A	A	A	X	X	X	—
MIL-G-2108	X	X	A	A	A	A	X	A	—
MIL-G-3278	X	X	A	B	B	X	X	X	—
MIL-G-4343B	X	X	A	B	B	B	C	B	—
MIL-G-5572	X	X	A	A	A	X	X	X	—
MIL-G-7118A	X	X	A	B	B	C	X	C	—
MIL-G-7187	X	X	A	A	A	X	X	X	—
MIL-G-7421A	X	X	A	B	B	C	X	C	—
MIL-G-7711A	X	X	A	A	A	X	X	X	—
MIL-G-10924B	X	X	A	A	A	X	X	B	—
MIL-G-15793	X	X	A	A	A	C	X	C	—
MIL-G-18709A	X	X	A	A	A	A	X	A	—
MIL-G-21568A	B	A	A	A	A	A	A	A	—
MIL-G-23827A	X	X	A	A	A	C	X	C	—
MIL-G-25013D	X	X	A	A	A	B	X	B	—
MIL-G-25537A	X	X	A	A	A	B	X	B	—
MIL-G-25760A	X	X	A	B	B	C	X	C	—
MIL-G-27343	—	B	A	X	X	—	A	—	—
MIL-G-27617	A	A	A	A	A	B	A	B	—
MIL-H-5559A	B	X	A	A	A	B	A	B	—
MIL-H-5606B	X	X	A	A	A	B	X	B	—
MIL-H-6083C	X	X	A	A	A	B	X	B	—
MIL-H-7083	B	B	A	A	A	B	A	B	—
MIL-H-7644	B	A	A	B	B	B	A	B	—
MIL-H-8446B	X	X	A	B	B	B	X	—	—
MIL-H-13862	X	X	A	A	A	B	X	B	—
MIL-H-13866A	X	X	A	A	A	B	X	B	—
MIL-H-13910B	B	X	A	B	B	B	A	B	—
MIL-H-13919A	X	X	A	A	A	B	X	B	—
MIL-H-19457B	X	X	X	X	X	A	A	X	—
MIL-H-22072	B	A	B	A	A	B	A	B	—

	NR	SBR	FPM	NBR	NBR II	CR	EPDM	CSM	XLPE
MIL-H-22251	—	B	—	B	B	B	A	B	—
MIL-H-25598	X	X	A	A	B	B	X	B	—
MIL-H-27601A	X	X	A	B	B	B	X	C	—
MIL-H-46001A	X	X	A	A	A	A	X	A	—
MIL-H-46004A	X	X	A	A	A	B	X	B	—
MIL-H-81019B	X	X	A	A	A	B	X	B	—
MIL-H-83282	X	X	A	A	A	B	X	B	—
MIL-I-8660B	A	A	A	A	A	A	A	A	—
MIL-I-27686D	B	A	B	A	A	B	A	B	—
MIL-J-5161F	X	X	A	B	B	X	X	X	—
MIL-J-5624G, JP-3	X	X	A	A	A	X	X	X	—
MIL-J-5624G, JP-4	X	X	A	A	A	X	X	X	—
MIL-J-5624G, JP-5	X	X	A	A	A	X	X	X	—
MIL-L-644B	C	C	—	A	A	C	C	C	—
MIL-L-2104B	X	X	A	A	A	B	X	C	—
MIL-L-2105B	X	X	A	A	A	B	X	A	—
MIL-L-3150A	X	X	A	A	A	B	X	B	—
MIL-L-3503	X	X	A	A	A	B	X	B	—
MIL-L-3545B	X	X	A	B	B	B	X	C	—
MIL-L-5020A	X	X	A	A	A	B	X	C	—
MIL-L-6081C	X	X	A	A	A	B	X	B	—
MIL-L-6082C	X	X	A	A	B	B	X	B	—
MIL-L-6085A	X	X	A	B	B	X	X	X	—
MIL-L-6086B	X	X	A	A	A	X	X	X	—
MIL-L-6387A	X	X	A	B	B	X	X	X	—
MIL-L-7645	X	X	A	B	B	B	X	C	—
MIL-L-7808F	X	X	A	B	B	X	X	X	—
MIL-L-7870A	X	X	A	B	B	X	X	X	—
MIL-L-8383B	X	X	A	A	A	A	X	A	—
MIL-L-9000F	X	X	A	A	A	B	X	C	—
MIL-L-9236B	X	X	A	B	B	X	X	X	—
MIL-L-10295A	X	X	A	A	B	B	X	X	—
MIL-L-10324A	X	X	A	A	A	B	X	X	—
MIL-L-11734B	X	X	A	A	A	C	X	B	—
MIL-L-14107B	X	X	A	C	C	A	X	—	—
MIL-L-15016	X	X	A	A	A	B	X	B	—
MIL-L-15017	X	X	A	A	A	B	X	B	—
MIL-L-15018B	X	X	A	A	A	A	X	A	—
MIL-L-15019C	X	X	A	A	A	A	X	A	—
MIL-L-15719A	C	B	A	B	B	B	B	B	—
MIL-L-16958A	X	X	A	A	A	B	X	B	—
MIL-L-17331D	X	X	A	A	A	B	X	B	—
MIL-L-17353A	X	X	A	A	A	C	X	C	—
MIL-L-17672B	X	X	A	A	A	A	X	A	—
MIL-L-18486A	X	X	A	A	A	A	X	A	—
MIL-L-19701	X	X	A	A	A	C	X	C	—
MIL-L-21260	X	X	A	A	A	B	X	B	—
MIL-L-22396	X	X	A	A	A	A	X	A	—
MIL-L-23699A	X	X	A	B	B	C	X	C	—
MIL-L-25336B	X	X	A	A	A	C	X	C	—
MIL-L-25681C	B	B	A	B	B	B	X	B	—
MIL-L-25968	X	X	A	A	B	C	A	B	—
MIL-L-26087A	X	X	A	A	A	A	X	A	—
MIL-L-27694A	A	A	A	A	A	A	A	A	—
MIL-L-46000A	X	X	A	A	A	C	X	C	—
MIL-L-46002	X	X	A	A	A	A	X	A	—
MIL-O-11773	X	X	A	A	A	C	X	C	—
MIL-P-12098	B	B	B	B	B	B	A	B	—
MIL-P-27402	—	B	—	B	B	B	A	B	—
MIL-P-46046A	B	A	A	B	B	B	A	B	—
MIL-S-3136B, Type I Fuel	X	X	A	A	A	B	X	C	—
MIL-S-3136B, Type II, Fu	X	X	A	B	B	X	X	X	—
MIL-S-3136B, Type III, Fu	X	X	A	B	B	X	X	X	—
MIL-S-3136B, Type IV	X	X	A	A	A	A	X	A	—
MIL-S-3136B, Type V	X	X	A	A	A	B	X	B	—
MIL-S-3136B, Type VI	X	X	A	A	A	X	X	X	—
MIL-S-3136B, Type VII	X	X	A	A	A	C	X	C	—
MIL-S-81087	A	A	A	A	A	A	A	A	—
MIL-T-9188B	X	X	X	X	X	A	A	X	—

## CHEMICAL SPECIFICATIONS

### Corrosion Resistance of Coupling Materials

RATINGS: 1. Excellent 2. Good 3. Fair or conditional X. Not satisfactory

NOTE: No rating indicates no data available.

AGENT	MALL. IRON / STEEL	BRASS	BRONZE	ALUMINUM	GLASS	STAINLESS 410, 416, 430	302, 303, 304, 308	316	MONEL	AGENT	MALL. IRON / STEEL	BRASS	BRONZE	ALUMINUM	GLASS	STAINLESS 410, 416, 430	302, 303, 304, 308	316	MONEL
Acetate, Solvents, Crude.....	—	3	—	—	—	2	1	1	2	Magnesium Sulfate.....	1	2	—	3	—	1	1	1	1
Acetate, Solvents, Pure.....	—	1	1	—	—	1	1	1	1	Mercuric Chloride.....	3	X	—	X	—	X	X	3	X
Acetic Acid.....	X	X	3	2	1	X	2	1	2	Mercury.....	1	X	—	X	—	1	1	1	2
Acetic Acid Vapors.....	X	X	—	3	—	X	2	1	3	Milk.....	2	3	—	—	—	2	1	1	3
Acetic Anhydride.....	3	X	—	1	—	X	2	1	2	Molasses.....	—	2	—	1	—	2	1	1	1
Acetone.....	1	1	—	1	—	1	1	1	1	Natural Gas.....	1	2	—	1	—	1	1	1	1
Acetylene.....	1	2	—	1	—	1	1	1	2	Nickel Chloride.....	—	X	—	X	—	X	3	2	2
Alcohols.....	1	2	—	1	—	1	1	1	1	Nickel Sulfate.....	—	3	—	X	—	3	2	1	1
Aluminum Sulfate.....	X	3	3	3	1	X	3	2	2	Nitric Acid.....	X	X	X	3	1	2	2	2	X
Alums.....	X	3	2	3	1	X	3	2	2	Oleic Acid.....	—	3	—	1	—	2	2	1	1
Ammonia Gas.....	1	X	3	1	3	1	1	1	X	Oxalic Acid.....	3	3	—	1	—	3	2	1	1
Ammonium Chloride.....	1	3	—	1	—	3	3	1	1	Oxygen.....	1	1	1	1	—	1	1	1	1
Ammonium Hydroxide.....	1	X	—	2	—	1	1	1	3	Palmitic Acid.....	1	3	—	1	—	2	2	1	1
Ammonium Nitrate.....	1	X	—	2	—	1	1	1	3	Petroleum Oils (Sour).....	—	3	—	—	—	3	1	1	X
Ammon. Phos. (Ammoniacal).....	—	X	—	—	—	1	1	1	2	Petroleum Oils (Refined).....	1	1	1	1	—	1	1	1	1
Ammon. Phosphate (Neutral).....	—	3	—	—	—	1	1	1	2	Phosphoric Acid-25%.....	3	X	—	3	3	X	3	1	2
Ammonium Phosphate (Acid).....	—	3	—	—	—	3	2	1	2	Phosphoric Acid-25-50%.....	X	X	—	X	3	X	X	2	2
Ammonium Sulfate.....	1	3	—	—	—	3	2	1	2	Phosphoric Acid-50-85%.....	X	X	—	X	X	X	X	2	2
Asphalt.....	1	2	—	—	—	2	1	1	1	Picric Acid.....	3	X	—	X	—	2	1	1	X
Beer.....	2	2	1	1	—	X	1	1	1	Potassium Chloride.....	1	3	—	3	—	3	2	1	1
Beet Sugar Liquors.....	1	2	—	1	—	2	1	1	1	Potassium Hydroxide.....	3	X	—	X	—	1	1	1	1
Benzene, Benzol.....	1	1	1	1	1	1	1	1	1	Potassium Sulfate.....	1	2	—	1	—	1	1	1	1
Benzine.....	1	1	—	1	—	1	1	1	1	Propane.....	1	1	—	—	—	1	1	1	1
Borax.....	1	1	—	2	—	1	1	1	1	Rosin (Dark).....	—	2	—	—	—	1	1	1	1
Boric Acid.....	X	3	—	1	—	3	2	1	1	Rosin (Light).....	—	X	—	—	—	1	1	1	2
Butane, Butylene.....	1	1	1	1	—	1	1	1	1	Shellac.....	—	2	—	—	—	1	1	1	1
Butadiene.....	—	1	—	—	—	1	1	1	1	Sludge Acid.....	—	X	—	—	—	X	X	3	2
Calcium Bisulfate.....	—	X	—	—	—	X	2	1	X	Soda Ash (Sodium Carbonate).....	1	2	—	X	—	1	1	1	1
Calcium Hypochlorite.....	3	3	3	X	3	X	3	2	3	Sodium Bicarbonate.....	3	1	—	X	—	1	1	1	1
Cane Sugar Liquors.....	1	2	—	1	—	2	1	1	1	Sodium Bisulfate.....	X	3	—	3	—	X	X	1	1
Carbon Dioxide (Dry).....	1	1	—	1	—	1	1	1	1	Sodium Chloride.....	1	3	2	X	1	3	2	1	1
Car. Diox. (Wet & Aqueous Sol).....	2	3	—	2	—	2	1	1	2	Sodium Cyanide.....	1	X	—	X	—	1	1	1	2
Carbon Disulfide.....	—	3	—	—	—	2	1	1	3	Sodium Hydroxide.....	1	X	3	X	X	1	1	1	1
Carbon Tetrachloride.....	3	1	2	3	1	1	1	1	1	Sodium Hypochlorite.....	X	X	—	X	—	X	3	2	3
Chlorine (Dry).....	1	2	1	1	2	2	2	2	1	Sodium Metaphosphate.....	—	3	—	1	—	2	1	1	1
Chlorine (Wet).....	X	X	3	X	2	X	X	3	3	Sodium Nitrate.....	1	3	—	1	—	1	1	1	1
Chromic Acid.....	—	X	X	X	1	3	2	1	3	Sodium Perborate.....	3	3	—	1	—	1	1	1	1
Citric Acid.....	X	3	—	1	—	3	2	1	2	Sodium Peroxide.....	3	3	—	1	—	1	1	1	1
Coke Oven Gas.....	1	3	—	—	—	1	1	1	2	Sodium Phosphate.....	—	3	—	—	—	1	1	1	1
Copper Sulfate.....	X	X	—	X	—	1	1	1	3	(Alkaline).....	—	3	—	—	—	1	1	1	1
Core Oils.....	1	1	1	—	—	1	1	1	1	(Neutral).....	—	2	—	—	—	1	1	1	1
Cottonseed Oil.....	1	1	1	1	—	1	1	1	1	(Acid).....	—	3	—	—	—	X	2	1	1
Creosote.....	1	3	—	1	—	1	1	1	1	Sodium Silicate.....	1	3	—	X	—	1	1	1	1
Ethers.....	1	1	—	1	—	1	1	1	1	Sodium Sulfate.....	1	2	—	3	—	1	1	1	1
Ethylene Glycol.....	1	2	—	—	—	1	1	1	1	Sodium Sulfide.....	—	X	—	—	—	1	1	1	2
Ferric Chloride.....	X	X	X	X	1	X	X	X	X	Sodium Thiosulfate (Hypo).....	3	X	—	X	—	1	1	1	2
Ferric Sulfate.....	X	X	—	X	—	1	1	1	3	Stearic Acid.....	3	3	—	3	—	2	2	1	1
Formaldehyde.....	2	2	—	2	—	1	1	1	1	Sulfate Liquors.....	—	X	—	—	—	1	1	1	2
Formic Acid.....	X	3	—	X	—	X	2	1	2	Sulfur.....	1	X	—	1	—	1	1	1	3
Freon.....	3	1	1	1	—	1	1	1	1	Sulfur Chloride.....	3	X	—	—	—	X	3	2	2
Furfural.....	1	2	—	1	—	1	1	1	1	Sulfur Dioxide (Dry).....	1	3	—	1	—	1	1	1	1
Gasoline (Sour).....	3	3	—	3	—	3	1	1	X	Sulfur Dioxide (Wet).....	—	X	—	—	—	X	2	1	X
Gasoline (Refined).....	1	1	1	1	—	1	1	1	1	Sulfuric Acid 10%.....	X	X	3	3	—	X	X	2	2
Gelatin.....	—	3	—	1	—	1	1	1	1	Sulfuric Acid 10-75%.....	X	X	3	3	—	X	X	X	2
Glucose.....	1	1	—	1	—	1	1	1	1	Sulfuric Acid 75-95%.....	3	X	X	3	—	3	3	2	3
Glue.....	1	3	—	1	—	1	1	1	1	Sulfuric Acid 95%.....	—	X	X	—	—	2	2	2	X
Glycerine or Glycerol.....	1	2	—	1	—	1	1	1	1	Sulfurous Acid.....	1	X	—	3	—	X	3	2	X
Hydrochloric Acid.....	X	X	3	X	1	X	X	X	3	Tannic Acid.....	—	—	—	X	—	—	3	3	1
Hydrocyanic Acid.....	3	X	—	—	—	3	1	1	2	Tar.....	1	2	—	1	—	2	1	1	1
Hydrofluoric Acid.....	X	3	3	X	X	X	X	X	1	Toluene, Toluol.....	1	1	—	1	—	1	1	1	1
Hydrogen Fluoride.....	—	3	—	—	—	3	2	1	1	Trichlorethylene.....	3	1	—	3	—	1	1	1	1
Hydrogen.....	1	1	—	1	—	1	1	1	1	Turpentine.....	—	3	—	1	—	3	1	1	1
Hydrogen Peroxide.....	X	X	—	1	—	1	1	1	1	Varnish.....	—	2	—	—	—	1	1	1	1
Hydrogen Sulfide (Dry).....	3	3	—	1	—	2	1	1	3	Vegetable Oils.....	—	2	—	—	—	1	1	1	1
Hydrogen Sulfide (Wet).....	3	3	—	1	—	3	2	1	3	Vinegar.....	3	3	—	3	—	3	2	1	2
Lacquers & Lacquer Solvents.....	3	3	—	1	—	1	1	1	1	Water (Acid Mine Water).....	3	X	—	3	—	3	3	3	3
Lactic Acid.....	X	—	—	3	—	—	3	2	1	Water (Fresh).....	3	3	—	1	—	1	1	1	1
Lime Sulfur.....	—	X	—	—	—	2	1	1	2	Water (Salt).....	3	3	2	X	—	3	2	2	1
Linseed Oil.....	1	1	—	1	—	—	1	1	1	Whiskey.....	X	2	—	—	—	3	1	1	2
Magnesium Chloride.....	2	3	—	X	—	3	2	1	1	Wines.....	X	2	—	—	—	3	1	1	2
Magnesium Hydroxide.....	1	2	—	X	—	1	1	1	1	Zylene, Xylol.....	3	X	—	X	—	X	X	2	1
										Zinc Chloride.....	3	3	—	3	—	3	2	1	1
										Zinc Sulfate.....	3	3	—	3	—	3	2	1	1