

**COMPOUND COMPATIBILITY RATING**  
 1 - Satisfactory  
 2 - Fair (usually OK for static seal)  
 3 - Doubtful (sometimes OK for static seal)  
 4 - Unsatisfactory  
 x - Insufficient Data

	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Hydro-Drive MIH-10 (Petroleum Base)	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	2
Hydro-Drive MIH-50 (Petroleum Base)	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	2
Hydrofluoric Acid (Anhydrous)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrofluoric Acid (conc.) Cold	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrofluoric Acid (conc.) Hot	V3819-75	4	X	4	3	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrofluorosilicic Acid	E0540-80	2	2	1	1	1	1	X	2	2	X	X	1	X	1	1	1	4	4
Hydrogen Bromide (Anhydrous)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Chloride (Anhydrous)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Chloride gas	E0540-80	4	X	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Cyanide	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Fluoride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Fluoride (Anhydrous)	E0540-80	4	4	1	4	1	1	2	X	4	4	X	1	4	4	4	X	4	X
Hydrogen Gas, Cold	E0540-80	1	1	1	1	1	1	X	1	2	2	1	1	1	1	2	1	3	3
Hydrogen Gas, Hot	E0540-80	1	1	1	1	1	1	X	1	2	2	1	1	1	1	2	1	3	3
Hydrogen Iodide (Anhydrous)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Peroxide	V1164-75	2	2	1	1	1	1	X	1	2	4	X	1	2	2	2	2	1	1
Hydrogen Peroxide 90%	V1164-75	4	4	3	1	1	1	X	4	4	4	X	3	4	4	4	3	2	2
Hydrogen Selenide	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Hydrogen Sulfide, Dry, Cold	E0540-80	1	1	1	4	1	1	X	1	1	4	X	1	1	1	1	1	3	3
Hydrogen Sulfide, Dry, Hot	E0540-80	4	4	1	4	1	1	X	2	4	4	X	1	4	4	4	3	3	3
Hydrogen Sulfide, Wet, Cold	E0540-80	4	4	1	4	1	1	X	1	4	4	X	1	4	4	4	2	3	3
Hydrogen Sulfide, Wet, Hot	E0540-80	4	4	1	4	1	1	X	2	4	4	X	1	4	4	4	3	3	3
Hydrolube-Water/Ethylene Glycol	N0674-70	1	1	1	1	1	1	X	2	1	4	4	2	X	X	X	2	2	
Hydroxycitronellal	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Hydroquinol	V1164-75	4	4	4	1	2	2	X	4	X	X	X	X	X	X	X	X	X	X
Hydroquinone	V1164-75	3	3	2	2	1	1	X	4	4	4	X	4	4	2	2	4	2	X
Hydroxyacetic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Hydrene	E0540-80	2	2	1	4	1	1	X	2	2	4	X	2	2	2	2	X	4	4
Hyjet	E1267-80	4	4	1	4	1	1	2	4	X	X	X	X	X	X	X	X	X	X
Hyjet IV and IVA	E1267-80	4	4	1	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Hyjet S4	E1267-80	4	X	1	4	1	1	2	4	X	X	X	X	X	X	X	X	X	X
Hyjet W	E1267-80	4	4	1	4	1	1	2	4	X	X	X	X	X	X	X	X	X	X
Hypochlorous Acid	V0834-70	4	4	2	1	1	1	X	4	4	4	X	2	4	2	2	1	X	X
— I —																			
Indole	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Industron FF44	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Industron FF48	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Industron FF53	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Industron FF80	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4

**Approximate Service Temperature Ranges for Commonly Used Basic Polymer Types\***

Nitrile (General Service)	-34°C to 121°C (-30°F to 250°F)*	AFLAS	-9°C to 232°C (15°F to 450°F)*
Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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Insulin	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Iodic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Iodine	V1164-75	2	2	2	1	1	1	X	4	2	X	X	2	X	4	X	2	1	X
Iodine Pentafluoride	Factory	4	4	4	4	2	2	X	4	4	4	4	4	4	4	4	4	4	4
Iodoform	V1164-75	X	X	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Isoamyl Acetate	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Isoamyl Butyrate	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Isoamyl Valerate	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Isoboreol	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Isobutane	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Isobutyl Acetate	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Isobutyl Alcohol	E0540-80	2	2	1	1	1	1	X	1	2	4	4	1	2	1	1	1	2	1
Isobutyl Chloride	V1164-75	4	4	4	1	1	1	4	4	X	X	X	X	X	X	X	X	X	X
Isobutyl Ether	V3819-75	2	2	4	4	2	1	4	3	X	X	X	X	X	X	X	X	X	X
Isobutyl Methyl Ketone	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Isobutyl n-Butyrate	E0540-80	4	4	1	1	1	1	X	4	4	4	X	1	4	4	4	4	1	X
Isobutyl Phosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Isobutylene	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Isobutyraldehyde	E0540-80	3	2	2	4	2	2	4	3	X	X	X	X	X	X	X	X	X	X
Isobutyric Acid	N0674-70	1	1	2	4	1	1	3	4	X	X	X	X	X	X	X	X	X	2
Isocrotyl Chloride	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Isodecanol	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Isododecane	N0674-70	1	1	4	1	1	1	X	2	4	4	X	4	4	4	4	2	1	4
Isoeugenol	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Isooctane	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	1	1	4
Isopar K	N0674-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Isopentane	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Isophorone (Ketone)	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Isopropanol	E0540-80	2	2	1	1	1	1	X	2	2	4	4	1	2	1	1	1	2	1
Isopropyl Acetate	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	2	4
Isopropyl Alcohol	E0540-80	2	2	1	1	1	1	X	2	2	4	4	1	2	1	1	1	2	1
Isopropyl Chloride	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Isopropyl Ether	N0674-70	2	2	4	4	1	1	X	3	4	3	2	4	4	4	4	3	3	4
Isopropylacetone	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Isopropylamine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
— J —																			
Jet Fuel A	V1164-75	2	2	4	1	1	1	2	4	4	4	3	4	4	4	4	4	2	X
JP-10	V1164-75	3	3	4	1	1	1	2	4	4	4	3	4	X	X	4	X	1	4
JP-3 (MIL-J-5624)	N0674-70	1	1	4	1	1	1	2	4	X	X	X	X	X	X	X	X	X	X
JP-4 (MIL-T-5624) (Jet A1)	N0602-70	1	1	4	1	1	1	2	4	4	2	2	4	4	4	4	4	2	4
JP-5 (MIL-T-5624)	N0602-70	1	1	4	1	1	1	2	4	4	2	2	4	4	4	4	4	2	4

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JP-6 (MIL-J-25656)	N0602-70	1	1	4	1	1	1	2	4	4	2	2	4	4	4	4	4	2	4
JP-8 (MIL-T-83133) (Jet A)	N0602-70	1	1	4	1	1	1	2	3	4	1	1	4	X	X	4	X	2	4
JP-9 (MIL-F-81912)	V1164-75	3	3	4	1	1	1	2	4	4	4	3	4	X	X	4	X	2	4
JP-9 -11	V1164-75	4	4	4	1	1	1	2	4	4	4	4	4	X	X	4	X	2	4
JPX (MIL-F-25604)	N0674-70	1	1	4	4	1	1	2	2	X	X	X	X	X	X	X	X	X	X
— K —																			
Karl Fischer Reagent		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kel F Liquids	E0540-80	1	1	1	2	1	1	X	X	1	X	X	1	X	X	X	1	2	1
Kerosene (Similar to RP-1 and JP-1)	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Keystone #87HX-Grease	N0674-70	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	4
— L —																			
Lacquer Solvents	V3819-75	4	4	4	4	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Lacquers	V3819-75	4	4	4	4	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Lactams-Amino Acids	E0540-80	4	4	2	4	1	1	X	2	4	X	X	2	4	4	4	2	4	X
Lactic Acid, Cold	N0674-70	1	1	1	1	1	1	X	1	1	4	X	1	1	1	1	1	1	1
Lactic Acid, Hot	V1164-75	4	4	4	1	1	1	X	4	4	4	X	4	4	4	4	3	2	2
Lactones (Cyclic Esters)	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	2
Lard Animal Fat	N0674-70	1	1	2	1	1	1	X	2	4	1	1	2	4	4	4	4	1	2
Lauric Acid	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Lavender Oil	V1164-75	2	2	4	1	1	1	1	4	X	X	X	X	X	X	X	X	X	X
LB 135	N0674-70	1	1	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X
Lead (Molten)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Lead Acetate	E0540-80	2	2	1	4	1	1	X	2	4	4	4	1	4	1	1	4	4	4
Lead Arsenate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Azide	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Lead Bromide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Carbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Chromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Dioxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Linoleate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Naphthenate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Lead Nitrate	N0674-70	1	1	1	X	1	1	X	1	1	X	X	1	1	1	1	1	1	2
Lead Oxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lead Sulfamate	C0873-70	2	2	1	1	1	1	X	1	2	4	X	1	2	2	2	1	1	2
Lehigh X1169	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Lehigh X1170	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Light Grease	N0674-70	1	1	4	1	1	1	1	4	X	X	X	X	X	X	X	X	X	X
Ligroin (Petroleum Ether or Benzene)	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	3	1	4
Lime Bleach	N0674-70	1	1	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X
Lime Sulfur	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X

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Lindol, Hydraulic Fluid (Phosphate ester type)	E0540-80	4	4	1	2	1	1	X	4	4	4	4	1	4	4	4	4	3	3
Linoleic Acid	S0604-70	2	2	4	2	1	1	X	2	4	X	X	4	4	4	4	2	X	2
Linseed Oil	N0674-70	1	1	3	1	1	1	X	3	4	1	2	3	4	4	4	2	1	1
Liquid Oxygen (LOX)	Factory	4	4	4	4	3	2	X	4	4	4	4	4	4	4	4	4	4	4
Liquid Petroleum Gas (LPG)	N0674-70	1	1	4	1	1	1	X	2	4	3	1	4	4	4	4	4	1	3
Liquimoly	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Lithium Bromide (Brine)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Carbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Citrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Hydroxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Hypochlorite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Nitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Nitrite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Perchlorate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithium Salicylate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lithopone	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Lubricating Oils (Crude & Refined)	V1164-75	2	2	4	1	1	1	3	X	X	X	X	X	X	X	X	X	X	X
Lubricating Oils (Synthetic base)	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Lubricating Oils, Di-ester	V1164-75	2	2	4	1	1	1	X	3	4	2	X	4	4	4	4	X	2	4
Lubricating Oils, petroleum base	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Lubricating Oils, SAE 10, 20, 30, 40, 50	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Lye Solutions	E0540-80	2	2	1	2	1	1	X	2	2	4	4	1	2	2	1	1	2	2
—M—																			
Magnesium Chloride	N0674-70	1	1	1	1	1	1	X	1	1	X	1	1	1	1	1	1	1	1
Magnesium Hydroxide	E0540-80	2	2	1	1	1	1	X	2	2	4	4	1	2	2	2	1	X	X
Magnesium Salts	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Magnesium Sulfite and Sulfate	N0674-70	1	1	1	1	1	1	X	1	2	4	X	1	2	2	2	1	1	1
Magnesium Trisilicate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Malathion	V1164-75	2	2	4	1	1	1	X	X	4	X	X	4	4	4	4	X	2	4
Maleic Acid	V1164-75	4	4	4	1	1	1	X	4	4	4	X	4	4	4	4	4	X	X
Maleic Anhydride	E0540-80	4	4	2	4	1	1	X	4	4	4	X	2	4	4	4	4	X	X
Maleic Hydrazide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Malic Acid	V1164-75	1	1	2	1	1	1	X	2	2	4	X	4	2	1	3	2	1	2
Mandelic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Acetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Carbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Dioxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Manganese Gluconate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Hypophosphite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Linoleate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Naphthenate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Manganese Phosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganese Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganous Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganous Phosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Manganous Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mannitol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
MCS 312	V1164-75	4	4	4	1	1	1	X	4	4	4	X	4	4	4	4	X	1	1
MCS 352	E1267-80	4	4	1	4	1	1	X	4	4	4	4	2	4	4	4	4	3	3
MCS 463	E1267-80	4	4	1	4	1	1	X	4	4	4	4	2	4	4	4	4	3	3
MDI (Methylene di-p-phenylene isocyanate)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercaptan	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Mercaptobenzothiazole (MBT)	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Mercuric Acetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercuric Chloride	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	X	X
Mercuric Cyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercuric Iodide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercuric Nitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercuric Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercuric Sulfite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercurous Nitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercury	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	X	X
Mercury Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercury Fulminate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercury Salts	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mercury Vapors	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	X	X
Mesityl Oxide (Ketone)	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Meta-Cresol	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Metaldehyde	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Meta-Nitroaniline	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Meta-Toluidine	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methacrylic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methallyl Chloride	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methane	N0674-70	1	1	4	1	1	1	X	2	4	1	3	4	4	4	4	2	3	4
Methanol	E0540-80	4	4	1	4	1	1	X	1	1	4	4	1	1	1	1	1	1	1
Methoxychlor	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Methoxyethanol (DGMMA)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Methyl Abietate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl Acetate	E0540-80	4	4	2	4	2	1	X	2	4	4	4	2	4	4	4	4	4	4
Methyl Acetoacetate	E0540-80	4	4	2	4	1	1	X	4	X	4	4	2	X	X	X	4	4	2
Methyl Acetophenone*	V1164-75	X	X	X	1	2	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl Acrylate	E0540-80	4	4	2	4	1	1	X	2	4	4	4	2	4	4	4	4	4	4
Methyl Alcohol	E0540-80	4	4	1	4	1	1	X	1	1	4	4	1	1	1	1	1	1	1
Methyl Amylketone	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Anthranilate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl Benzoate	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	1	4
Methyl Bromide	V1164-75	2	2	4	1	1	1	X	4	4	3	X	4	4	4	4	4	1	X
Methyl Butyl Ketone	E0540-80	4	4	1	4	2	1	X	4	4	4	4	1	4	4	4	4	4	4
Methyl Butyrate Cellosolve	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Butyrate Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Carbonate	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Methyl Cellosolve	E0540-80	3	3	2	4	1	1	X	3	4	4	4	2	4	4	4	2	4	4
Methyl Cellulose	N0674-70	2	2	2	4	1	1	X	2	2	4	2	2	2	2	2	2	4	2
Methyl Chloride	V1164-75	4	4	3	1	1	1	X	4	4	4	4	3	4	4	4	4	2	4
Methyl Chloroacetate	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Chloroform	V1164-75	4	4	4	1	1	1	4	4	X	X	X	X	X	X	X	X	X	X
Methyl Chloroformate	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Methyl Chlorosilanes	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Methyl Cyanide (Acetonitrile)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Cyclohexanone	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Methyl Dichloride	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyldiethanolamine (MDEA)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Methyl Ether	N0674-70	1	1	4	1	2	1	X	3	4	4	X	4	1	1	4	4	1	1
Methyl Ethyl Ketone (MEK)	E0540-80	4	4	1	4	2	1	X	4	4	4	4	1	4	4	4	4	4	4
Methyl Ethyl Ketone Peroxide	S0604-70	4	4	4	4	1	1	X	4	4	4	4	4	4	4	4	4	4	2
Methyl Ethyl Oleate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl Formate	C0873-70	4	4	2	X	1	1	X	2	4	X	X	2	4	4	4	2	X	X
Methyl Hexyl Ketone (2-Octanone)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Iodide	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Methyl Isobutyl Ketone (MIBK)	Factory	4	4	3	4	1	1	X	4	4	4	4	3	4	4	4	4	4	4
Methyl Isocyanate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Isopropyl Ketone	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Methyl Isovalerate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl Lactate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methyl Mercaptan	E0540-80	X	X	1	X	1	1	X	X	X	X	1	X	X	X	X	X	X	X
Methyl Methacrylate	V3819-75	4	X	4	4	1	1	X	4	4	4	X	4	4	4	4	4	4	4
Methyl Oleate	V1164-75	4	4	2	1	1	1	X	4	4	X	X	2	4	X	4	4	2	X

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Methyl Pentadiene	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl Phenylacetate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methylphenyl Carbinol		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Methyl Salicylate	E0540-80	4	4	2	X	1	1	X	4	3	X	X	2	X	X	3	4	X	X
Methyl Tertiary Butyl Ether (MTBE)	V3819-75	3	3	3	3	2	1	2	3	X	X	X	X	X	X	X	X	X	X
Methyl Valerate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methyl-2-Pyrrolidone or n-Methyl-2-Pyrrolidone	E0540-80	X	X	2	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Methylacrylic Acid	E0540-80	4	4	2	3	1	1	X	2	4	4	4	2	4	4	4	4	4	4
Methylal	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Methylamine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methylamyl Acetate	E0540-80	3	3	1	3	2	1	X	1	1	4	4	1	1	1	1	1	1	2
Methylcyclopentane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Methylene Bromide	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methylene Chloride	V1164-75	4	4	4	2	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Methylene Iodide	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methylglycerol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Methylisobutyl Carbinol	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Methylpyrrolidine	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methylpyrrolidone	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Methylsulfuric Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
MIL-A-6091	E1267-80	2	2	1	1	1	1	X	1	1	4	4	1	1	1	1	1	1	1
MIL-C-4339	N0304-75	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	3
MIL-C-7024	N0602-70	1	1	4	1	1	1	X	2	4	2	1	4	4	4	4	4	1	4
MIL-C-8188	V1164-75	2	2	4	2	1	1	X	4	4	3	4	4	4	4	4	4	2	4
MIL-E-9500	E1267-80	1	1	1	1	1	1	X	1	1	4	4	1	1	1	1	1	1	1
MIL-F-16884	N0304-75	1	1	4	1	1	1	X	3	4	1	3	4	4	4	4	3	1	4
MIL-F-17111	N0304-75	1	1	4	1	1	1	X	2	4	1	3	4	4	4	4	2	2	4
MIL-F-25558 (RJ-1)	N0602-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
MIL-F-25656	N0602-70	1	1	4	1	1	1	X	4	4	2	2	4	4	4	4	4	2	4
MIL-F-5566	E1267-80	2	2	1	1	1	1	X	2	2	4	2	1	2	1	1	1	1	1
MIL-F-81912 (JP-9)	V1164-75	3	3	4	1	1	1	X	4	4	4	3	4	X	X	4	X	2	4
MIL-F-82522 (RJ-4)	N0602-70	2	2	4	1	1	1	X	4	4	1	1	4	1	1	1	X	1	4
MIL-G-10924	N0304-75	1	1	4	1	1	1	X	2	4	2	1	4	4	4	4	2	1	4
MIL-G-15793	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	2	4
MIL-G-21568	E1267-80	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	4
MIL-G-23827		1	X	4	1	1	1	X	3	X	3	3	3	X	X	X	X	1	4
MIL-G-25013	V1164-75	1	1	1	1	1	1	X	2	1	1	3	1	4	4	2	2	1	4
MIL-G-25537	N0304-75	1	1	4	1	1	1	X	2	4	2	1	4	4	4	4	2	1	4
MIL-G-25760	V1164-75	2	2	4	1	1	1	X	2	4	2	2	4	4	4	4	2	2	4
MIL-G-3278	L1120-70	2	2	4	1	1	1	X	4	4	1	2	4	4	4	4	4	2	4

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Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

NOTE: \*These temperature ranges will apply to the majority of media for which the material is potentially recommended. With some media however, the service temperature range may be significantly different. ALWAYS TEST UNDER ACTUAL SERVICE CONDITIONS.

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FFKM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
MIL-G-3545	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
MIL-G-4343	V1164-75	2	2	3	1	1	1	X	2	1	1	1	3	1	1	1	1	1	3
MIL-G-5572	N0602-70	1	1	4	1	1	1	X	4	4	2	2	4	4	4	4	4	1	4
MIL-G-7118	N0304-75	2	2	4	1	1	1	X	2	4	3	3	4	4	4	4	2	1	4
MIL-G-7187	N0304-75	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	4
MIL-G-7421	L1120-70	2	2	4	1	1	1	X	2	4	4	2	4	4	4	4	2	2	4
MIL-G-7711	N0304-75	1	1	4	1	1	1	X	4	4	2	1	4	4	4	4	4	1	2
MIL-H-13910	E1267-80	1	1	1	1	1	1	X	1	1	2	4	1	1	1	1	1	2	4
MIL-H-19457	V1164-75	4	4	2	1	1	1	X	4	4	4	4	1	4	4	4	4	4	3
MIL-H-22072	N0304-75	1	X	1	2	1	1	X	2	X	X	4	4	X	X	X	X	2	2
MIL-H-22251	E1267-80	2	2	1	X	X	X	X	2	2	X	X	1	X	X	X	2	X	4
MIL-H-27601	V1164-75	1	1	4	1	1	1	X	2	4	1	3	4	4	4	4	3	2	4
MIL-H-46170 -15°F to +400°F	V1164-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-H-46170 -20°F to +275°F	N0756-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-H-46170 -55°F to +275°F	N0756-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-H-46170 -65°F to +275°F	N0756-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-H-5606 -65°F to +235°F	N0304-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-H-5606 -65°F to +275°F	N0756-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-H-6083	N0304-75	1	1	4	1	1	1	X	1	4	1	1	4	4	4	2	2	1	4
MIL-H-7083	E1267-80	1	1	1	2	1	1	X	2	2	4	4	1	3	3	2	2	1	1
MIL-H-81019	LM158-70	1	X	4	1	1	1	X	2	X	1	2	4	X	X	X	X	1	3
MIL-H-8446 (MLO-8515)	V1164-75	2	2	4	1	1	1	X	1	4	3	4	4	4	4	4	X	1	4
MIL-J-5161	N0602-70	2	2	4	1	1	1	X	4	4	1	2	4	4	4	4	4	1	4
Milk	N0508-75	1	1	1	1	1	1	X	1	1	4	4	1	1	1	1	1	1	1
MIL-L-15016	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	2	4
MIL-L-15017	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	2	4
MIL-L-17331	V1164-75	1	1	4	1	1	1	X	X	4	X	X	4	4	4	4	X	X	4
MIL-L-2104	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	3	1	4
MIL-L-21260	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
MIL-L-23699	V1164-75	2	2	4	1	1	1	X	3	4	3	3	4	4	4	4	3	2	4
MIL-L-25681	V1164-75	2	2	1	1	1	1	X	2	2	2	3	1	2	2	2	2	2	4
MIL-L-3150	N0304-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
MIL-L-6081	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
MIL-L-6082	N0304-75	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	3
MIL-L-6085	V1164-75	2	2	4	1	1	1	X	4	4	2	3	4	4	4	4	4	2	4
MIL-L-6387	V1164-75	2	2	4	1	1	1	X	4	4	2	1	4	4	4	4	4	2	4
MIL-L-7808	V1164-75	2	2	4	1	1	1	X	4	4	2	4	4	4	4	4	4	2	4
MIL-L-7870	N0304-75	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
MIL-L-9000	N0304-75	1	1	4	1	1	1	X	2	4	1	3	4	4	4	4	2	2	4
MIL-L-9236	V1164-75	2	2	4	1	1	1	X	4	4	2	2	4	4	4	4	4	2	4

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Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
MIL-O-3503	N0304-75	1	1	4	1	1	1	X	2	4	2	1	4	4	4	2	1	4	
MIL-P-27402	E1267-80	2	2	1	X	X	X	X	2	2	X	X	1	X	X	X	2	X	4
MIL-PRF-17672	N0304-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MIL-PRF-2105	N0304-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MIL-PRF-81322	N0304-70	1	1	4	1	1	1	1	2	4	1	1	4	4	4	4	X	1	3
MIL-PRF-87252	N0674-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MIL-R-25576 (RP-1)	N0602-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
MIL-S-3136, Type I Fuel	N0602-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
MIL-S-3136, Type II Fuel	N0602-70	2	2	4	1	1	1	X	4	4	3	2	4	4	4	4	4	2	4
MIL-S-3136, Type III Fuel	N0602-70	2	2	4	1	1	1	X	4	4	3	2	4	4	4	4	4	2	4
MIL-S-3136, Type IV Oil High Swell	N0674-70	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	2
MIL-S-3136, Type IV Oil Low Swell	N0674-70	1	1	4	1	1	1	X	1	4	1	1	4	4	4	4	1	1	3
MIL-S-3136, Type V Oil Medium Swell	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
MIL-S-81087	E1267-80	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	2	3
MIL-T-5624, JP-4, JP-5	N0602-70	1	1	4	1	1	1	X	4	4	2	2	4	4	4	4	4	2	4
MIL-T-83133	N0602-70	1	1	4	1	1	1	X	3	4	1	1	4	X	X	4	X	2	4
Mineral Oils	N0674-70	1	1	3	1	1	1	X	2	4	1	1	3	4	4	4	2	1	2
Mixed Acids	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
MLO-7277 Hydr.	V1164-75	3	3	4	1	1	1	X	4	4	3	3	4	4	4	4	4	3	4
MLO-7557	V1164-75	3	3	4	1	1	1	X	4	4	3	3	4	4	4	4	4	3	4
MLO-8200 Hydr.	V1164-75	2	2	4	1	1	1	X	1	4	X	1	4	4	4	4	4	2	4
MLO-8515	V1164-75	2	2	4	1	1	1	X	1	4	3	1	4	4	4	4	3	1	4
Mobil DTE 20 Series	N0674-70	1	1	4	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Mobil 254 Lubricant	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Mobil Delvac 1100, 1110, 1120, 1130	N0674-70	1	1	4	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Mobil HF	N0674-70	1	1	4	1	1	1	X	2	X	X	X	X	X	X	X	X	X	X
Mobil Nivac 20, 30	N0674-70	1	1	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X
Mobil SHC 500 Series	V1164-75	3	3	4	1	1	1	X	2	X	1	2	4	X	X	X	2	2	2
Mobil SHC 600 Series	V1164-75	3	3	4	1	1	1	X	2	4	1	1	4	X	X	X	2	2	3
Mobil Therm 600	N0674-70	1	1	4	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Mobil Velocite c	N0674-70	1	1	4	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Mobilgas WA200 ATF	N0674-70	1	1	4	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Mobilgear 600 Series	V1164-75	3	3	3	1	1	1	X	1	4	1	2	3	3	4	4	2	1	1
Mobilgear SHC ISO Series	V1164-75	3	3	3	1	1	1	X	2	4	1	2	3	3	4	4	2	1	1
Mobilgrease HP	V1164-75	2	2	4	1	1	1	X	2	4	1	1	4	X	4	4	3	1	2
Mobilgrease HTS	V1164-75	2	2	4	1	1	1	X	2	4	1	1	4	X	4	4	3	1	2
Mobilgrease SM	V1164-75	2	2	4	1	1	1	X	2	4	1	1	4	X	4	4	3	1	2
Mobilith AW Series	V1164-75	2	2	4	1	1	1	X	2	4	1	1	4	X	4	4	3	1	2
Mobilith SHC Series	V1164-75	2	2	4	1	1	1	X	3	4	1	1	4	X	4	4	3	1	2
Mobiljet 291	VM835-75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Mobiljet II Lubricant	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Mobilmistlube Series	V1164-75	3	3	3	1	1	1	X	1	4	1	2	3	3	4	4	2	1	1
Mobiloil SAE 20	N0674-70	1	1	4	1	1	1	1	2	4	1	1	4	4	4	4	X	1	X
Mobilux	N0674-70	1	1	4	1	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Molybdenum Disulfide Grease	N0674-70	1	X	4	1	1	1	1	4	X	X	X	X	X	X	X	X	X	X
Molybdenum Oxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Molybdenum Trioxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Molybdic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Monobromobenzene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Monobromotoluene	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Monobutyl Paracresol	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Monochloroacetic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Monochlorobenzene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Monochlorobutene	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Monochlorohydrin	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Monoethanolamine (MEA)	E0540-80	4	4	2	4	2	1	X	4	2	4	4	2	2	2	2	4	4	2
Monoethyl Amine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Monoisopropylamine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Monomethyl Aniline	E0540-80	4	X	1	2	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Monomethyl Ether (Dimethyl Ether)	V3819-75	X	X	X	X	2	1	X	X	X	X	X	X	X	X	X	X	X	X
Monomethyl Ether (Methyl Ether)	N0674-70	1	X	4	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Monomethyl Hydrazine	E0540-80	2	2	1	X	1	1	X	2	2	X	X	1	X	X	X	2	X	4
Monomethylamine (MMA)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Monomethylaniline	V1164-75	4	4	2	2	1	1	X	4	4	4	4	2	4	4	4	4	X	X
Mononitrotoluene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Mononitrotoluene & Dinitrotoluene (40/60 Mixture)	E0540-80	4	4	1	3	2	2	X	4	4	4	4	4	4	4	4	4	3	4
Monovinyl Acetylene	E0540-80	1	1	1	1	1	1	X	2	2	X	X	1	2	2	2	2	X	2
Mopar Brake Fluid	E0667-70	3	3	1	4	1	1	X	2	1	X	X	2	X	X	X	2	4	3
Morpholine	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Motor Oils	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Mustard Gas	E1267-80	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Myristic Acid	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
— N —																			
Naphthalene	V1164-75	4	4	4	1	1	1	X	4	4	X	2	4	4	4	4	4	1	4
Naphthalene Chloride	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Naphthalene Sulfonic Acid	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Naphthalenic Acid	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Naphthalonic Acid	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X

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Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Naphthenic Acid	V1164-75	2	2	4	1	1	1	X	4	4	X	X	4	4	4	4	4	1	4
Naphthylamine	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Naptha	V1164-75	2	2	4	1	1	1	X	4	4	2	2	4	4	4	4	4	2	4
Natural Gas	N0674-70	1	1	4	1	1	1	X	1	2	2	2	4	2	2	2	1	3	4
Neatsfoot Oil	N0674-70	1	1	2	1	1	1	X	4	4	1	1	2	4	4	4	4	1	2
Neon	B0612-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Neville Acid	V1164-75	4	4	2	1	1	1	X	4	4	4	X	2	4	4	4	4	2	4
Nickel Acetate	E0540-80	2	2	1	4	1	1	X	2	4	4	4	1	4	1	1	4	4	4
Nickel Ammonium Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nickel Chloride	N0674-70	1	1	1	1	1	1	X	2	1	3	3	1	1	1	1	1	1	1
Nickel Cyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nickel Nitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nickel Salts	N0674-70	1	1	1	1	1	1	X	2	1	3	3	1	1	1	1	1	1	1
Nickel Sulfate	N0674-70	1	1	1	1	1	1	X	1	2	4	3	1	2	2	2	1	1	1
Nicotinamide (Niacinamide)	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Nicotinamide Hydrochloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nicotine	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Nicotine Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Niter Cake	N0674-70	1	1	1	1	1	1	X	1	1	4	1	1	1	1	1	1	1	1
Nitric Acid, Red Fuming	V3819-75	4	4	4	2	1	1	3	4	X	X	X	X	X	X	X	X	X	X
Nitric Acid, White Fuming	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Nitric Acid (0 - 50%)	V1164-75	4	X	2	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nitric Acid (50 - 100%)	V3819-75	4	X	4	3	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nitric Acid 3 Molar to 158°F	E0540-80	4	4	2	3	2	2	X	4	3	4	4	2	X	X	X	2	4	4
Nitric Acid Concentrated Room Temp.	V0834-70	X	X	4	2	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nitric Acid Concentrated to 158°F	V3819-75	4	4	4	4	3	2	X	4	4	4	4	4	X	X	4	X	4	4
Nitric Oxide	E0540-80	3	X	3	3	X	X	X	3	X	X	4	4	X	X	X	X	X	4
Nitroaniline	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrobenzene	E0540-80	4	4	1	2	1	1	X	4	4	4	4	1	4	4	4	4	4	4
Nitrobenzoic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrocellulose	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrochlorobenzene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrochloroform	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrodiethylaniline	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrodiphenyl Ether	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nitroethane	E0540-80	4	4	2	4	1	1	X	2	2	4	4	2	2	2	2	2	4	4
Nitrofluorobenzene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrogen	B0612-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Nitrogen Dioxide	E0540-80	3	3	1	4	1	1	X	1	X	4	3	2	X	X	X	X	1	2
Nitrogen Oxides	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FFKM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Nitrogen Tetroxide (N2O4)	Factory	4	3	4	4	2	2	X	4	4	4	4	3	4	4	4	4	4	4
Nitrogen Trifluoride	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Nitroglycerine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitroglycerol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitroisopropylbenzene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitromethane	E0540-80	4	4	2	4	1	1	X	3	3	4	4	2	2	2	2	2	4	4
Nitrophenol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitropropane	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Nitrosyl Chloride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nitrosylsulfuric Acid	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nitrothiophene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrotoluene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrous Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Nitrous Oxide	E0540-80	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X	X	1
Nonane	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Nonylphenoxy Polyethoxy Ethanol		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Noryl GE Phenolic	N0674-70	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nyvac FR200 Mobil	N0674-70	1	1	1	1	1	1	X	2	4	X	X	4	4	X	4	3	X	X
— O —																			
Octachloro Toluene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Octadecane	N0674-70	1	1	4	1	1	1	X	2	4	2	1	4	4	4	4	2	1	4
Octanal (n-Octanaldehyde)	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Octane or n-Octane	V1164-75	1	1	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Octyl Acetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Octyl Alcohol	V1164-75	2	2	3	1	1	1	X	2	2	4	4	2	2	2	2	2	2	2
Octyl Chloride	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Octyl Phthalate	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Olefins	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Oleic Acid	V0834-70	3	3	4	2	1	1	X	4	4	4	2	4	4	4	4	4	X	4
Oleum (Fuming Sulfuric Acid)	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	X	4
Oleum Spirits	V1164-75	2	2	4	1	1	1	X	3	4	X	3	4	4	4	4	2	2	4
Oleyl Alcohol	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Olive Oil	N0674-70	1	1	2	1	1	1	X	2	4	1	1	2	4	4	4	2	1	3
Oronite 8200	V1164-75	2	2	4	1	1	1	X	1	4	X	1	4	4	4	4	4	1	4
Oronite 8515	V1164-75	2	2	4	1	1	1	X	1	4	X	1	4	4	4	4	4	1	4
Ortho-Chloro Ethyl Benzene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Ortho-Chloroaniline	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Ortho-Chlorophenol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Ortho-Cresol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Ortho-Dichlorobenzene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Ortho-Nitrotoluene	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Orthophos Acid	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
OS 45 Type III (OS45)	V1164-75	2	2	4	1	1	1	X	1	4	X	4	4	4	4	4	2	2	4
OS 45 Type IV (OS45-1)	V1164-75	2	2	4	1	1	1	X	1	4	X	4	4	4	4	4	2	2	4
OS 70	V1164-75	2	2	4	1	1	1	X	1	4	X	4	4	4	4	4	2	2	4
Oxalic Acid	E0540-80	2	2	1	1	1	1	X	2	2	X	X	1	2	2	2	2	1	2
Oxygen, 200°-300°F (Evalute for specific applications)	V1164-75	4	4	4	2	1	1	1	3	4	1	X	1	X	X	4	X	1	1
Oxygen, 300°-400°F (Evalute for specific applications)	S0604-70	4	4	4	2	1	1	X	4	4	4	4	4	4	4	4	4	4	1
Oxygen, Cold (Evalute for specific applications)	C0873-70	2	2	1	1	1	1	X	1	2	2	1	1	2	2	2	1	1	1
Oxygen, Liquid	V3819-75	4	4	4	4	3	2	4	4	X	X	X	X	X	X	X	X	X	X
Ozonated Deionized Water	E0540-80	3	3	1	3	2	2	X	1	1	4	4	1	1	1	1	1	1	2
Ozone	E0540-80	4	2	1	1	1	1	X	2	4	2	1	2	4	4	4	1	1	1
— P —																			
PAG Compressor Oil	N1173-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Paint Thinner, Duco	V1164-75	4	4	4	2	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Palmitic Acid	N0674-70	1	1	2	1	1	1	X	2	2	X	1	2	2	2	3	1	4	
PAO	V1164-75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Para-Aminobenzoic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Para-Aminosalicylic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Para-Bromobenzylphenyl Ether	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Para-Chlorophenol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Paracymene	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Para-Dichlorobenzene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Paraffins	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Para-Formaldehyde	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Paraldehyde	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Par-al-Ketone	Factory	4	4	4	4	X	X	X	4	4	4	4	4	4	4	4	4	4	4
Para-Nitroaniline	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Para-Nitrobenzoic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Para-Nitrophenol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Parathion	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Para-Toluene Sulfonic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Paraxylene	V1164-75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Parker O Lube	N0674-70	1	1	4	1	1	1	X	1	2	1	1	4	4	4	4	1	1	2
Peanut Oil	N0674-70	1	1	3	1	1	1	X	3	4	1	2	3	4	4	4	2	1	1
Pectin (Liquor)	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Pelagonic Acid	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Penicillin (Liquid)	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X

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Nitrile (General Service)	-34°C to 121°C (-30°F to 250°F)*	AFLAS	-9°C to 232°C (15°F to 450°F)*
Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (- 5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FFKM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Pentachloroethane	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Pentachlorophenol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pentaerythritol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pentaerythritol Tetranitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pentafluoroethane (F-125)	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Pentane or n-Pentane	N0674-70	1	1	4	1	1	1	X	1	3	1	4	4	4	4	4	2	3	4
Pentane, 2 Methyl	N0674-70	1	1	4	1	1	1	X	2	4	1	4	4	4	4	4	2	3	4
Pentane, 2-4 dimethyl	N0674-70	1	1	4	1	1	1	X	2	4	1	4	4	4	4	4	2	3	4
Pentane, 3-Methyl	N0674-70	1	1	4	1	1	1	X	2	4	1	4	4	4	4	4	2	3	4
Pentoxone	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Pentyl Pentanoate	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Peracetic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Perchloric Acid - 2N	E0540-80	4	4	1	1	1	1	X	2	4	4	4	2	4	4	4	2	1	2
Perchloroethylene	V1164-75	2	2	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Perfluoropropane	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Perfluorotriethylamine	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Permanganic Acid	FF200-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Persulfuric Acid (Caro's Acid)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Petrolatum	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Petrolatum Ether	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Petroleum Oil, Above 250°F	V1164-75	4	4	4	2	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Petroleum Oil, Below 250°F	N0674-70	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	2	2
Petroleum Oil, Crude	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Phenol	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Phenol, 70% / 30% H2O	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Phenol, 85% / 15% H2O	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Phenolic Sulfonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phenolsulfonic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phenylacetamide	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Phenylacetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phenylacetic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phenylbenzene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Phenylene Diamine	FF500-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phenylethyl Alcohol	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Phenylethyl Ether	FF200-75	4	4	4	4	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Phenylethyl Malonic Ester*	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Phenylglycerine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phenylhydrazine	V1164-75	4	4	2	1	1	1	X	4	2	4	X	4	2	1	1	4	X	X
Phenylhydrazine Hydrochloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phenylmercuric Acetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Phorone	Factory	4	4	3	4	1	1	X	4	4	4	4	3	4	4	4	4	4	4
Phosgene	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phosphine	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phosphoric Acid 3 Molar to 158°F	E0540-80	1	1	1	1	1	1	X	2	2	3	4	1	X	X	X	1	2	2
Phosphoric Acid Concentrated Room Temp	E0540-80	2	2	1	1	1	1	X	2	1	2	4	1	X	X	X	1	3	3
Phosphoric Acid Concentrated to 158°F	E0540-80	4	4	1	1	1	1	X	3	2	3	4	1	X	X	X	1	3	4
Phosphoric Acid, 20%	E0540-80	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phosphoric Acid, 45%	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phosphorus (Molten)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phosphorus Oxychloride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Phosphorus Trichloride	E0540-80	4	4	1	1	1	1	X	4	4	X	X	1	X	X	4	4	1	X
Phosphorus Trichloride Acid	E0540-80	4	4	1	1	1	1	4	X	X	X	X	X	X	X	X	X	X	X
Phthalic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Phthalic Anhydride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pickling Solution	V0834-70	4	4	3	2	1	1	X	4	4	4	4	3	4	4	4	2	4	4
Picric Acid (aq)	C0873-70	1	1	1	1	1	1	X	1	2	X	X	1	2	2	1	1	2	X
Picric Acid Molten	V0834-70	2	2	2	1	1	1	X	2	2	X	X	2	2	2	2	2	2	4
Pine Oil	N0674-70	1	1	4	1	1	1	X	4	4	X	X	4	4	4	4	4	1	4
Pine Tar	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Pinene	V1164-75	2	2	4	1	1	1	X	3	4	4	2	4	4	4	4	4	1	4
Piperazine	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Piperidine	V1164-75	4	4	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	4
Piranha (H2SO4:H2O2)(70:30)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Plating Solution (Co,Cu,Au,In,Fe,Pb,Ni,Ag,Sn,Zn)	N0674-70	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Plating Solutions Chrome	V1164-75	4	4	2	1	1	1	X	4	4	4	4	2	4	4	4	4	2	2
Plating Solutions Others	E0540-80	1	1	1	1	1	1	X	4	4	X	X	1	X	X	4	1	X	4
Pneumatic Service	N0674-70	1	1	1	1	1	1	X	1	4	4	1	1	4	4	4	1	4	4
Polyetherpolyol		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Polyethylene Glycol	E0540-80	2	2	1	3	1	1	2	X	X	X	X	X	X	X	X	X	X	X
Polyglycerol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Polyglycol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Polyolester (POE)	N1173-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Polyvinyl Acetate Emulsion	E0540-80	X	X	1	X	1	1	X	2	4	X	X	1	X	X	2	2	X	X
Potassium (Molten)	V3819-75	X	X	X	X	4	4	X	X	X	X	X	X	X	X	X	X	X	X
Potassium Acetate	E0540-80	2	2	1	4	1	1	X	2	4	4	4	1	4	1	1	1	4	4
Potassium Acid Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Alum	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Aluminum Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Antimonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Bicarbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Potassium Bichromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Bifluoride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Bisulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Bisulfite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Bitartrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Bromide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Carbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Chlorate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Chloride	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Potassium Chromates	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Citrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Cupro Cyanide	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Potassium Cyanate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Cyanide	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Potassium Dichromate	N0674-70	1	1	1	1	1	1	X	1	1	1	2	1	1	1	1	1	1	1
Potassium Diphosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Ferricyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Fluoride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Glucocyanate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Hydroxide 50%	E0540-80	2	2	1	4	1	1	X	2	2	4	4	1	2	2	2	1	3	3
Potassium Hypochlorite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Iodate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Iodide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Metabisulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Metachromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Metasilicate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Potassium Monochromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Nitrate	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Potassium Nitrite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Oxalate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Perchlorate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Perfluoro Acetate	V3819-75	X	X	X	X	2	1	X	X	X	X	X	X	X	X	X	X	X	X
Potassium Permanganate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Peroxide	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Potassium Persulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Phosphate (Acid)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Phosphate (Alkaline)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Phosphate (Di/Tri Basic)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Pyrosulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Salts	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1

**Approximate Service Temperature Ranges for Commonly Used Basic Polymer Types\***

Nitrile (General Service)	-34°C to 121°C (-30°F to 250°F)*	AFLAS	-9°C to 232°C (15°F to 450°F)*
Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polycrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

**NOTE:** \*These temperature ranges will apply to the majority of media for which the material is potentially recommended. With some media however, the service temperature range may be significantly different. ALWAYS TEST UNDER ACTUAL SERVICE CONDITIONS.



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 x - Insufficient Data

	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Potassium Silicate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Potassium Sodium Tartrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Stannate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Stearate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Sulfate	N0674-70	1	1	1	1	1	1	X	1	2	4	1	1	1	2	2	2	1	1
Potassium Sulfide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Sulfite	N0674-70	1	1	1	1	1	1	X	1	2	4	1	1	1	2	2	2	1	1
Potassium Tartrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Thiocyanate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Thiosulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Potassium Triphosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Prestone Antifreeze	N0674-70	1	1	1	1	1	1	X	1	1	4	4	1	1	1	1	1	1	1
PRL-High Temp. Hydr. Oil	V1164-75	2	2	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	2
Producer Gas	N0674-70	1	1	4	1	1	1	X	2	4	2	1	4	4	4	4	2	2	2
Propane	N0674-70	1	1	4	1	1	1	X	2	4	1	3	4	4	4	4	2	2	4
Propionaldehyde	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Propionic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Propionitrile	N0674-70	1	1	4	1	1	1	2	X	X	X	X	X	X	X	X	X	X	X
Propyl Acetate	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Propyl Acetone or n-Propyl Acetone	E0540-80	4	4	1	4	1	1	X	4	4	4	4	1	4	4	4	4	4	4
Propyl Alcohol	N0674-70	1	1	1	1	1	1	X	1	1	4	4	1	1	1	1	1	1	1
Propyl Nitrate	E0540-80	4	4	2	4	1	1	X	4	4	4	X	2	4	4	4	4	4	4
Propyl Propionate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Propylamine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Propylbenzene	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Propylene	V1164-75	3	3	4	1	1	1	X	4	4	4	4	4	4	4	4	4	3	4
Propylene Chloride	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Propylene Chlorohydrin	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Propylene Dichloride	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Propylene Glycol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Propylene Imine	V1164-75	X	X	X	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Propylene Oxide	E0540-80	4	4	2	4	1	1	X	4	4	4	4	2	4	4	4	4	4	4
Pydraul 90e	E0540-80	4	4	1	1	1	1	1	4	X	X	X	X	X	X	X	X	X	X
Pydraul, 10E	E0540-80	4	4	1	4	1	1	X	4	4	4	4	1	4	4	4	4	4	1
Pydraul, 115E	V1164-75	4	4	1	1	1	1	X	4	4	4	4	1	4	4	4	4	3	4
Pydraul, 230C, 312C, 540C, A200	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Pydraul, 29ELT 30E, 50E, 65E	V1164-75	4	4	1	1	1	1	X	4	4	4	4	1	4	4	4	4	1	1
Pyranol Transformer Oil	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	2	1	4
Pyridine	V1164-75	4	4	2	1	2	1	X	4	4	4	3	4	4	4	4	4	2	X
Pyridine Oil	E0540-80	4	4	2	4	1	1	X	4	4	4	X	2	4	4	4	4	4	4

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Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Pyridine Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pyridine Sulfonic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pyrogallol (Pyrogallic Acid)	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Pyrogard 42, 43, 55	E0540-80	4	4	1	1	1	1	2	4	X	X	X	X	X	X	X	X	X	X
Pyrogard 53, Mobil Phosphate Ester	E0540-80	4	4	1	1	1	1	X	4	4	4	4	1	4	4	4	4	4	4
Pyrogard D, Mobil Water-in-Oil Emulsion	N0674-70	1	1	4	4	1	1	X	2	4	X	1	4	4	4	4	1	2	3
Pyroligneous Acid	E0540-80	4	4	2	4	1	1	X	2	4	4	4	2	4	4	4	2	4	X
Pyrolube	V1164-75	4	4	2	1	1	1	X	4	4	4	4	2	4	4	4	4	2	2
Pyrosulfuric Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Pyrosulfuryl Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Pyrrole	E0540-80	4	4	4	4	1	1	X	4	2	4	X	4	2	2	2	2	4	2
Pyruvic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
— Q —																			
Quinidine	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Quinine	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Quinine Bisulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Quinine Hydrochloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Quinine Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Quinine Tartrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Quinizarin	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Quinoline	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Quinone	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Quintolubric	N0674-70	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Quintolubric 888	V1164-75	1	1	4	1	1	1	2	X	X	1	2	X	X	X	X	X	X	X
— R —																			
Radiation (Gamma, 1.0 E+07 Rads)	E0740-75	3	3	2	4	3	2	X	X	X	X	4	4	X	X	4	X	4	2
Raffinate	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Rapeseed Oil	E0540-80	2	2	1	1	1	1	X	2	4	2	2	1	4	4	4	2	1	4
Red Line 100 Oil	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Red Oil (MIL-H-5606)	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Resorcinol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Rhodium	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Riboflavin	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Ricinoleic Acid	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
RJ-1 (MIL-F-25558)	N0602-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
RJ-4 (MIL-F-82522)	N0602-70	2	2	4	1	1	1	X	4	4	2	2	4	X	X	4	X	1	4
Rosin	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
RP-1 (MIL-R-25576)	N0602-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4

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—S—																			
Saccharin Solution	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sal Ammoniac	E0540-80	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	2
Salicylic Acid	E0540-80	2	2	1	1	1	1	X	X	2	X	X	1	2	1	1	X	1	X
Santo Safe 300	V1164-75	4	4	3	1	1	1	X	4	4	4	X	3	4	4	4	X	1	1
Sea (Salt) Water	N0674-70	1	1	1	1	1	1	X	2	1	4	2	1	1	1	1	1	1	1
Sebacic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Selenic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Selenous Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sewage	N0674-70	1	1	1	1	1	1	X	2	1	4	4	1	1	1	1	1	1	1
SF 1154 GE Silicone Fluid	E0740-75	2	2	1	1	1	1	X	1	1	1	2	1	X	1	1	1	1	4
SF1147 GE Silicone Fluid	V1164-75	2	2	3	1	1	1	X	X	X	X	X	3	X	X	X	X	X	4
SF96 GE Silicone Fluid	E0740-75	2	2	1	1	1	1	X	1	1	1	2	1	1	1	1	1	1	4
Shell 3XF Mine Fluid (Fire resist hydr.)	N0674-70	1	1	4	1	1	1	X	2	4	4	4	4	4	4	4	2	1	X
Shell Alvania Grease #2	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	2
Shell Carnea 19 and 29	N0674-70	1	1	4	1	1	1	X	4	4	1	2	4	4	4	4	4	1	X
Shell Diala	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Shell Irus 905	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Shell Lo Hydrax 27 and 29	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Shell Macome 72	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Shell Tellus #32 Pet. Base	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Shell Tellus #68	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Shell Tellus 27 (Petroleum Base)	N0674-70	1	1	4	1	1	1	2	X	X	X	X	X	X	X	X	X	X	X
Shell Tellus 33	N0674-70	1	1	4	1	1	1	2	X	X	X	X	X	X	X	X	X	X	X
Shell UMF (5% Aromatic)	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Shellac	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Silane	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Silicate Esters	V1164-75	2	2	4	1	1	1	X	1	4	X	1	4	4	4	4	X	1	4
Silicon Fluoride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Silicon Tetrachloride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Silicon Tetrafluoride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Silicone Greases	E0540-80	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	2	3
Silicone Oils	E0540-80	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	3	3
Silver Bromide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Silver Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Silver Cyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Silver Nitrate	E0540-80	2	2	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Silver Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sinclair Opaline CX-EP Lube	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Skelly, Solvent B, C, E	N0674-70	1	1	4	1	1	1	X	4	4	X	X	4	4	4	4	4	1	X
Skydrol 500 B4	E1267-80	4	4	1	4	1	1	X	4	4	4	4	2	4	4	4	4	3	3

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Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

NOTE: \*These temperature ranges will apply to the majority of media for which the material is potentially recommended. With some media however, the service temperature range may be significantly different. ALWAYS TEST UNDER ACTUAL SERVICE CONDITIONS.

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 1 - Satisfactory  
 2 - Fair (usually OK for static seal)  
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 4 - Unsatisfactory  
 x - Insufficient Data

	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FFKM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Skydrol 7000	E1267-80	4	4	1	2	1	1	1	4	X	X	X	X	X	X	X	X	X	X
Skydrol LD-4	E1267-80	4	4	1	4	1	1	X	4	4	4	4	2	4	4	4	4	3	3
Soap Solutions	E0540-80	1	1	1	1	1	1	X	2	2	4	4	1	1	1	2	1	1	1
Socony Mobile Type A	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Socony Vacuum AMV AC781 (Grease)	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Socony Vacuum PD959B	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Soda Ash	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Sodium (Molten)	Factory	X	X	X	X	4	4	X	X	X	X	X	X	X	X	X	X	X	X
Sodium Acetate	E0540-80	2	2	1	4	1	1	X	2	4	3	3	1	4	1	1	1	4	4
Sodium Acid Bisulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Acid Fluoride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Acid Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Aluminate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Aluminate Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Anthraquinone Disulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Antimonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Arsenate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Arsenite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Benzoate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Bicarbonate (Baking Soda)	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Sodium Bichromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Bifluoride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Bisulfate or Bisulfite	N0674-70	1	1	1	1	1	1	X	1	2	4	X	1	2	2	1	1	1	1
Sodium Bisulfide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Bitartrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Borate	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Sodium Bromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Bromide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Carbonate (Soda Ash)	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Sodium Chlorate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Chloride	N0674-70	1	1	1	1	1	1	X	1	1	X	1	1	1	1	1	1	X	1
Sodium Chlorite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Chloroacetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Chromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Citrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Cyanamide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Cyanate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Cyanide	N0674-70	1	1	1	X	1	1	X	1	1	X	X	1	1	1	1	1	X	1
Sodium Diacetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Diphenyl Sulfonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Sodium Diphosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Disilicate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Ethylate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Ferricyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Ferrocyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Fluoride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Fluorosilicate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Glutamate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Hydride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Sodium Hydrogen Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Hydrosulfide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Hydrosulfite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Hydroxide, 3 Molar	E0540-80	2	2	1	2	1	1	X	2	2	4	2	1	1	1	1	1	2	1
Sodium Hypochlorite	E0540-80	2	2	1	1	1	1	X	2	2	4	4	1	2	2	2	1	2	2
Sodium Hypophosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Hypophosphite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Hyposulfite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Iodide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Lactate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Metaphosphate	N0674-70	1	1	1	1	1	1	X	2	1	X	X	1	1	1	1	2	1	X
Sodium Metasilicate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Methylate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Monophosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Nitrate	E0540-80	2	2	1	X	1	1	X	2	2	X	X	1	1	1	2	1	X	4
Sodium Oleate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Orthosilicate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Oxalate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Perborate	E0540-80	2	2	1	1	1	1	X	2	2	X	X	1	2	2	2	2	1	2
Sodium Percarbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Perchlorate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Peroxide	E0540-80	2	2	1	1	1	1	X	2	2	4	4	1	2	2	2	2	1	4
Sodium Persulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Phenolate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Phenoxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Phosphate (Dibasic)	N0674-70	1	1	1	1	1	1	X	2	1	1	1	1	1	1	1	1	X	4
Sodium Phosphate (Mono)	N0674-70	1	1	1	1	1	1	X	2	1	1	1	1	1	1	1	1	X	4
Sodium Phosphate (Tribasic)	N0674-70	1	1	1	1	1	1	X	2	1	1	1	1	1	1	1	1	X	1
Sodium Plumbite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Pyrophosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Resinate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Sodium Salicylate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Salts	N0674-70	1	1	1	1	1	1	X	2	1	1	1	1	1	1	1	1	1	1
Sodium Sesquisilicate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Sodium Silicate	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	X	X
Sodium Silicofluoride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Sodium Stannate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Sulfate	N0674-70	1	1	1	1	1	1	X	1	2	4	1	1	2	2	2	1	1	1
Sodium Sulfide and Sulfite	N0674-70	1	1	1	1	1	1	X	1	2	4	1	1	2	2	2	1	1	1
Sodium Sulfo cyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Tartrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Tetraborate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Tetrphosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Tetrasulfide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Thioarsenate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Thiocyanate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Thiosulfate	E0540-80	2	2	1	1	1	1	X	1	2	4	1	1	2	2	2	1	1	1
Sodium Trichloroacetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sodium Triphosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Solvesso 100, 150	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Sorbitol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sour Crude Oil	V1238-95	3	3	4	1	1	1	X	4	4	4	4	4	4	4	4	X	4	4
Sour Natural Gas	V1238-95	3	3	4	1	1	1	X	4	4	4	4	4	4	4	4	X	4	4
Sovasol No. 1, 2, and 3	N0674-70	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
Sovasol No. 73 and 74	V1164-75	2	2	4	1	1	1	X	2	4	2	2	4	4	4	4	2	1	4
Soybean Oil	N0674-70	1	1	3	1	1	1	X	3	4	1	X	3	4	4	4	3	1	1
Spry	N0674-70	1	1	2	1	1	1	X	2	4	1	1	2	4	4	4	4	1	1
SR-10 Fuel	N0674-70	1	1	4	1	1	1	X	4	4	2	2	4	4	4	4	4	1	4
SR-6 Fuel	V1164-75	2	2	4	1	1	1	X	4	4	2	2	4	4	4	4	4	1	4
Standard Oil Mobilube GX90-EP Lube	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Stannic Ammonium Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Stannic Chloride	N0674-70	1	1	1	1	1	1	X	4	1	X	X	1	1	1	1	4	1	2
Stannic Chloride, 50%	N0674-70	1	1	1	1	1	1	X	4	1	X	X	1	1	1	1	4	1	2
Stannic Tetrachloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Stannous Bisulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Stannous Bromide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Stannous Chloride (15%)	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	2
Stannous Fluoride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Stannous Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Stauffer 7700	V1164-75	2	2	4	1	1	1	X	4	4	2	X	4	4	4	4	4	2	4
Steam Below 400°F	E0692-75	4	4	1	4	1	1	X	4	4	4	4	2	4	4	4	4	4	3

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 1 - Satisfactory  
 2 - Fair (usually OK for static seal)  
 3 - Doubtful (sometimes OK for static seal)  
 4 - Unsatisfactory  
 x - Insufficient Data

	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Steam, 400° - 500°F	E0962-90	4	4	3	4	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Steam, Above 500°F	FF200-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Stearic Acid	N0674-70	2	2	2	X	1	1	X	2	2	X	X	2	2	2	2	2	X	2
Stoddard Solvent	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Strontium Acetate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Strontium Carbonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Strontium Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Strontium Hydroxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Strontium Nitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Styrene (Monomer)	V1164-75	4	4	4	2	1	1	X	4	4	4	X	4	4	4	4	4	3	4
Succinic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sucrose Solutions	N0674-70	1	1	1	1	1	1	X	2	1	4	4	1	1	1	1	2	1	1
Sulfamic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sulfanilic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sulfanilic Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Sulfanilimide	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Sulfite Liquors	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sulfolane	E0540-80	2	2	1	2	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Sulfonated Oils	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Sulfonic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sulfonyl Chloride	E0540-80	3	3	1	3	2	2	X	1	1	4	4	1	1	1	1	1	1	2
Sulfur	E0540-80	4	4	1	1	1	1	X	1	4	4	X	1	4	4	4	X	1	X
Sulfur (Molten)	V1164-75	4	4	3	1	1	1	X	3	4	4	4	3	4	4	4	4	3	3
Sulfur Chloride	V1164-75	4	4	4	1	1	1	X	4	4	4	X	4	4	4	4	4	1	3
Sulfur Dioxide, Dry	E0540-80	4	4	1	4	1	1	X	4	2	4	X	2	2	2	2	4	2	2
Sulfur Dioxide, Liquidified under pressure	E0540-80	4	4	1	4	1	1	X	4	4	4	X	2	4	4	4	4	2	2
Sulfur Dioxide, Wet	E0540-80	4	4	1	4	1	1	X	2	4	4	X	1	4	4	4	3	2	2
Sulfur Hexafluoride	E0540-80	2	2	1	3	2	2	3	1	X	X	X	X	X	X	X	X	X	X
Sulfur Liquors	V0834-70	2	2	2	1	1	1	X	2	2	4	X	2	2	2	2	2	2	4
Sulfur Monochloride	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Sulfur Tetrafluoride	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Sulfur Trioxide Dry	V1164-75	4	4	2	1	1	1	X	4	3	4	X	2	2	2	2	4	2	2
Sulfuric Acid (20% Oleum)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sulfuric Acid, 3 Molar to 158°F	E0540-80	2	2	1	1	1	1	X	2	3	2	4	1	X	X	X	1	1	1
Sulfuric Acid, Concentrated Room Temp	V1164-75	X	X	3	1	1	1	X	X	X	X	3	X	X	X	X	X	X	X
Sulfuric Acid, Concentrated to 158°F	V1164-75	4	X	4	1	1	1	X	4	4	4	4	4	X	X	X	X	4	4
Sulfuric Chlorohydrin (Chlorosulfonic Acid)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Sulfurous Acid	V1164-75	2	2	2	1	1	1	X	2	2	4	3	2	2	2	2	1	X	4
Sunoco #3661	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Sunoco All purpose grease	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4

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Nitrile (General Service)	-34°C to 121°C (-30°F to 250°F)*	AFLAS	-9°C to 232°C (15°F to 450°F)*
Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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Sunoco SAE 10	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
SunSAFE (Fire resist. hydr. fluid)	N0674-70	1	1	4	1	1	1	X	2	4	4	4	4	4	4	4	2	1	X
Super Shell Gas	N1500-75	1	1	4	1	1	1	X	2	4	2	2	4	4	4	4	4	2	4
Surfuryl Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Swan Finch EP Lube	N0674-70	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	4
Swan Finch Hypoid-90	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
— T —																			
Tallow	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Tannic Acid (10%)	N0674-70	1	1	1	1	1	1	X	1	2	4	X	1	1	1	1	1	1	2
Tar, bituminous	V1164-75	2	2	4	1	1	1	X	3	4	4	X	4	4	2	3	4	1	2
Tartaric Acid	N0674-70	1	1	2	1	1	1	X	2	4	X	1	2	2	1	3	1	1	1
Tellone II	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Terephthalic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Terpineol	V1164-75	2	2	3	1	1	1	X	4	4	X	2	3	4	4	4	4	1	X
Terpinyl Acetate	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Tertiary Amyl Methyl Ether (TAME)	V3819-75	X	X	X	X	2	1	X	X	X	X	X	X	X	X	X	X	X	X
Tertiary Butyl Catechol or p-tert-butylcatechol	V1164-75	4	4	2	1	1	1	X	2	2	4	4	2	2	4	4	2	1	X
Tertiary Butyl Mercaptan	V1164-75	4	4	4	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Tetrabromoethane	V1164-75	4	4	4	1	1	1	X	4	4	4	X	4	4	4	4	4	2	4
Tetrabromomethane	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Tetrabutyl Titanate	E0540-80	2	2	1	1	1	1	X	2	2	X	X	2	2	2	2	4	4	4
Tetrachloroethylene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Tetrachoroethane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	X
Tetraethyl Lead	V1164-75	2	2	4	1	1	1	X	2	4	X	X	4	4	4	4	4	2	X
Tetraethyl Lead "Blend"	V1164-75	2	2	4	1	1	1	X	4	4	X	X	4	4	4	4	4	2	X
Tetraethyl Orthosilicate (TEOS)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Tetrahydrofuran	FF500-75	4	4	2	4	1	1	X	4	4	4	3	2	4	4	4	4	4	4
Tetrahydrothiophen	V1164-75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tetralin	V1164-75	4	4	4	1	1	1	X	4	4	X	X	4	4	4	4	4	1	4
Tetramethyl Ammonium Hydroxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	X	2
Tetramethylcyclotetrasiloxane (TMCTS)	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Tetramethyldihydropyridine	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Tetraphosphoglucosate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Tetraphosphoric Acid	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Tetrasodium Pyrophosphate	E0540-80	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Texaco 3450 Gear Oil	N0674-70	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	4
Texaco Capella A and AA	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4

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Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Texaco Meropa 220 (No Lead)	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	1	4
Texaco Regal B	N0674-70	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	4
Texaco Uni-Temp Grease	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	2
Texamatic "A" 1581 Fluid	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Texamatic "A" 3401 Fluid	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Texamatic "A" 3525 Fluid	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Texamatic "A" 3528 Fluid	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Texamatic "A" Transmission Oil	N0674-70	1	1	4	1	1	1	X	2	4	1	2	4	4	4	4	4	2	4
Texas 1500 Oil	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	2
Therminol 44	V1164-75	4	4	4	1	1	1	X	4	X	4	X	4	X	X	X	X	X	4
Therminol 55	V1164-75	2	2	4	1	1	1	X	4	X	2	X	4	X	X	X	X	X	4
Therminol 66	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Therminol FR	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Therminol VP-1, 60, 65	V1164-75	4	4	4	1	1	1	X	4	X	4	X	4	X	X	X	X	X	2
Thio Acid Chloride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Thioamyl Alcohol	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Thiodiacetic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Thioethanol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Thioglycolic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Thiokol TP-90B	E0540-80	4	4	1	1	1	1	X	2	4	X	X	1	X	X	X	2	2	X
Thiokol TP-95	E0540-80	4	4	1	1	1	1	X	2	4	X	X	1	X	X	X	2	2	X
Thionyl Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Thiophene (Thiofuran)	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Thiophosphoryl Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Thiourea	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Thorium Nitrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Tidewater Multigear, 140 EP Lube	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Tidewater Oil-Beedol	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	2
Tin Ammonium Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Tin Chloride	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Tin Tetrachloride	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Titanic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Titanium Chloride	V1164-75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Titanium Dioxide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Titanium Sulfate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Titanium Tetrachloride	V1164-75	2	2	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Toluene	V1164-75	4	4	4	1	2	1	X	4	4	4	4	4	4	4	4	4	2	4
Toluene Bisodium Sulfite	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Toluene Diisocyanate (TDI)	E0540-80	4	4	2	4	1	1	X	4	4	4	X	2	4	4	4	4	4	4
Toluene Sulfonyl Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X

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Toluenesulfonic Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Toluidine	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Toluol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Toluquinone	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Tolylaldehyde	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Toothpaste	E3609-70	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1
Transformer Oil	N0674-70	1	1	4	1	1	1	X	2	4	2	1	4	4	4	4	4	1	2
Transmission Fluid Type A	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Triacetin	E0540-80	2	2	1	4	1	1	X	2	3	4	4	1	2	2	2	2	4	X
Triaryl Phosphate	E0540-80	4	4	1	1	1	1	X	4	4	4	4	1	4	4	4	4	2	3
Tribromomethylbenzene	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Tributoxyethyl Phosphate	E0540-80	4	4	1	1	1	1	X	4	2	4	4	1	2	4	2	4	2	X
Tributyl Citrate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Tributyl Mercaptan	V1164-75	4	4	4	1	1	1	X	4	4	4	X	4	4	4	4	4	3	4
Tributyl Phosphate	E0540-80	4	4	1	4	1	1	X	4	4	4	4	2	4	2	2	4	4	4
Tributylamine	FF500-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Trichloroacetic Acid	E0540-80	2	2	2	3	1	1	X	4	2	4	4	2	2	2	2	4	4	X
Trichloroacetyl Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Trichlorobenzene	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Trichloroethane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Trichloroethanolamine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Trichloroethylene	V1164-75	3	3	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Trichloromethane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Trichloronitromethane (Chloropicrin)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Trichlorophenylsilane	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Trichloropropane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Trichlorosilane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Tricresyl Phosphate	E0540-80	4	4	1	2	1	1	X	3	2	4	4	1	4	4	4	4	2	3
Triethanol Amine	E0540-80	3	3	2	4	1	1	X	2	2	4	4	2	2	2	2	2	4	X
Triethyl Phosphate	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Triethylaluminum	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Triethylborane	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Triethylene Glycol	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Triethylenetetramine	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Trifluoroacetic Acid	E0540-80	3	3	1	3	2	2	X	1	1	4	4	1	1	1	1	1	1	2
Trifluoroethane (R-23)	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Trifluoromethane	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	2	4
Trifluorovinylchloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Triisopropylbenzylchloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Trimethylamine (TMA)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2

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Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPDM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Trimethylbenzene	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Trimethylborate (TMB)	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Trimethylpentane	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Trinitroloeuene (TNT)	V1164-75	4	4	4	2	1	1	X	2	4	4	X	4	4	4	4	2	2	X
Trioctyl Phosphate	E0540-80	4	4	1	2	1	1	X	4	4	4	4	1	4	4	4	4	2	3
Triphenylphosphite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Tripoly Phosphate	E0540-80	4	4	1	2	1	1	X	3	4	4	4	1	4	4	4	4	1	3
Tripotassium Phosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Trisodium Phosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Tritium	Factory	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tung Oil (China Wood Oil)	N0674-70	1	1	4	1	1	1	X	2	4	X	3	3	4	4	4	3	2	4
Tungsten Hexafluoride	V3819-75	X	X	X	X	2	2	X	X	X	X	X	X	X	X	X	X	X	X
Tungstic Acid	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Turbine Oil	N0674-70	1	1	4	1	1	1	X	4	4	1	1	4	4	4	4	4	1	4
Turbine Oil #15 (MIL-L-7808A)	V1164-75	2	2	4	1	1	1	X	4	4	2	4	4	4	4	4	4	2	4
Turbo Oil #35	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Turpentine	N0674-70	1	1	4	1	1	1	X	4	4	2	4	4	4	4	4	4	2	4
Type I Fuel (MIL-S-3136)(ASTM Ref. Fuel A)	N0602-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Type II Fuel MIL-S-3136	N0602-70	2	2	4	1	1	1	X	4	4	3	2	4	4	4	4	4	2	4
Type III Fuel MIL-S-3136(ASTM Ref. Fuel B)	N0602-70	2	2	4	1	1	1	X	4	4	3	2	4	4	4	4	4	2	4
— U —																			
Ucon Hydrolube J-4	N0674-70	1	1	1	1	1	1	X	2	1	4	4	1	2	X	X	X	2	1
Ucon Lubricant 50-HB-100	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB-260	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB-5100	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB55	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB-660	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-1145	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-135	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-285	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-300X	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-625	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-65	N0674-70	1	1	1	1	1	1	X	1	2	X	X	1	2	2	2	2	1	1
Ucon Oil 50-HB-280x	E0540-80	2	2	1	3	1	1	1	2	X	X	X	X	X	X	X	X	X	X
Ucon Oil Heat Transfer Fluid 500 (Polyalkalene Glycol)	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Ucon Oil LB-385	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1

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	Recommended	Nitrile NBR	Hydrogenated Nitrile HNBR	Ethylene Propylene EPDM	Fluorocarbon FKM	Hifluor FKM	Perfluoroelastomer FFKM	Aflas (TFE/Propylene) FEPM	Neoprene/Chloroprene CR	Styrene-Butadiene SBR	Polyacrylate ACM	Polyurethane AU, EU	Butyl IIR	Butadiene BR	Isoprene IR	Natural Rubber NR	Hypalon CSM	Fluorosilicone FVMQ	Silicone MQ, VMQ, PVMQ
Ucon Oil LB-400X	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	1
Undecylenic Acid	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Undecylic Acid	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Univis 40 (Hydr. Fluid)	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	4
Univolt #35 (Mineral Oil)	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Unsymmetrical Dimethyl Hydrazine (UDMH)	E0540-80	2	2	1	4	1	1	X	2	2	X	X	1	1	1	1	1	4	4
UPDI(Ultrapur Deionized Water)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Uranium Hexachloride	V1164-75	X	X	X	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Uranium Hexafluoride	Factory	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uranium Sulfate	Factory	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uric Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	3	2
— V —																			
Valeraldehyde	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Valeric Acid	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Vanadium Oxide	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Vanadium Pentoxide	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	2	1	2
Varnish	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	4
Vegetable Oil	N0674-70	1	1	3	1	1	1	X	3	4	1	X	3	4	4	4	X	1	1
Versilube F44, F55	N0674-70	1	1	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X
Versilube F-50	E0540-80	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	3
Vinegar	E0540-80	2	2	2	3	1	1	X	2	2	4	4	2	2	2	2	X	3	3
Vinyl Acetate	E0540-80	2	2	1	3	2	1	1	2	X	X	X	X	X	X	X	X	X	X
Vinyl Benzene	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Vinyl Benzoate	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Vinyl Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Vinyl Fluoride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Vinylidene Chloride	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Vinylpyridine	V1164-75	2	2	4	1	1	1	X	4	4	4	3	4	4	4	4	4	2	X
Vitriol (White)	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
VV-H-910	E0540-80	3	3	1	1	1	1	X	2	1	2	4	2	2	2	2	2	2	2
V V-L-825	C0873-70	1	X	4	X	1	1	X	1	X	1	2	4	X	X	X	X	1	3
— W —																			
Wagner 21B Brake Fluid	E0667-70	3	3	1	4	1	1	X	2	1	X	X	2	X	X	2	2	4	3
Water	E0540-80	1	2	1	2	1	1	X	2	1	4	4	1	1	1	1	1	1	1
Wemco C	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
Whiskey and Wines	E3609-70	1	1	1	1	1	1	X	1	1	4	4	1	1	1	1	1	1	1
White Liquor	N0674-70	1	1	1	1	1	1	1	1	X	X	X	X	X	X	X	X	X	X

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White Oil	N0674-70	1	1	4	1	1	1	X	2	4	1	1	4	4	4	4	4	1	4
White Pine Oil	V1164-75	2	2	4	1	1	1	X	4	4	X	X	4	4	4	4	4	1	4
Wolmar Salt	N0674-70	1	1	1	1	1	1	X	2	1	2	1	1	1	1	1	1	1	1
Wood Alcohol	N0674-70	1	1	1	4	1	1	X	1	1	4	4	1	1	1	1	1	1	1
Wood Oil	N0674-70	1	1	4	1	1	1	X	2	4	1	3	3	4	4	4	3	2	4
— X —																			
Xenon	N0674-70	1	1	1	1	1	1	X	1	1	1	1	1	1	1	1	1	1	1
Xylene	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	1	4
Xylidenes-Mixed-Aromatic Amines	E0540-80	3	3	1	4	1	1	X	4	4	4	4	4	4	4	4	4	4	4
Xylol	V1164-75	4	4	4	1	1	1	X	4	4	4	4	4	4	4	4	4	1	4
— Z —																			
Zeolites	N0674-70	1	1	1	1	1	1	X	1	1	X	X	1	1	1	1	1	1	X
Zinc Acetate	E0540-80	2	2	1	4	1	1	X	2	4	4	4	1	4	1	1	4	4	4
Zinc Ammonium Chloride	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Bromide Completion Fluid	V1164-75	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Zinc Chloride	N0674-70	1	1	1	1	1	1	X	1	1	4	X	1	1	1	1	1	1	X
Zinc Chromate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Cyanide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Diethyldithiocarbamate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Dihydrogen Phosphate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Fluorosilicate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Zinc Hydrosulfite	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Naphthenate	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Zinc Nitrate	N0674-70	1	1	1	1	1	1	X	X	1	4	X	1	1	1	1	1	1	X
Zinc Oxide	N0674-70	1	1	1	1	1	1	X	X	1	4	X	1	1	1	1	1	1	X
Zinc Phenolsulfonate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Phosphate	N0674-70	1	1	1	1	1	1	X	1	1	4	1	1	1	1	1	1	1	1
Zinc Salts	N0674-70	1	1	1	1	1	1	X	1	1	4	1	1	1	1	1	1	1	1
Zinc Silicofluoride	V3819-75	X	X	X	X	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Zinc Stearate	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zinc Sulfate	N0674-70	1	1	1	1	1	1	X	1	2	4	4	1	2	2	2	1	1	1
Zinc Sulfide	E0540-80	3	3	1	3	1	1	X	1	1	4	4	1	1	1	1	1	1	2
Zirconium Nitrate	N0674-70	1	1	1	1	1	1	X	1	2	4	4	1	2	2	2	1	1	1

**Approximate Service Temperature Ranges for Commonly Used Basic Polymer Types\***

Nitrile (General Service)	-34°C to 121°C (-30°F to 250°F)*	AFLAS	-9°C to 232°C (15°F to 450°F)*
Nitrile (Low Temperature)	-55°C to 107°C (-65°F to 225°F)*	Neoprene	-51°C to 107°C (-60°F to 225°F)*
Hydrogenated Nitrile	-32°C to 149°C (-23°F to 300°F)*	Polyacrylate	-21°C to 177°C (-5°F to 350°F)*
Ethylene Propylene	-57°C to 121°C (-70°F to 250°F)*	Polyurethane	-40°C to 82°C (-40°F to 180°F)*
Fluorocarbon	-26°C to 205°C (-15°F to 400°F)*	Butyl	-59°C to 120°C (-75°F to 250°F)*
Hifluor	-26°C to 205°C (-15°F to 400°F)*	Fluorosilicone	-73°C to 177°C (-100°F to 350°F)*
Perfluoroelastomer (Parofluor)	-26°C to 320°C (-15°F to 608°F)*	Silicone	-115°C to 232°C (-175°F to 450°F)*

NOTE: \*These temperature ranges will apply to the majority of media for which the material is potentially recommended. With some media however, the service temperature range may be significantly different. ALWAYS TEST UNDER ACTUAL SERVICE CONDITIONS.

