

# Rubber Chemical Resistance Chart

1 = Satisfactory, 2 = Fair, 3 = Doubtful, 4 = Unsatisfactory, X = Insufficient Data				
	EPDM	NBR	Silicone	Viton
Abietic Acid	X	X	X	X
Acetaldehyde	2	3	2	4
Acetamide	1	1	2	3
Acetanilide	1	3	2	3
Acetic Acid, 30%	1	X	X	X
Acetic Acid, 5%	1	2	1	1
Acetic Acid, Glacial	1	2	1	2
Acetic Acid, Hot, High Pressure	3	4	3	4
Acetic Anhydride	2	3	2	4
Acetoacetic Acid	1	3	2	3
Acetone	1	4	4	4
Acetone Cyanohydrin	1	3	2	3
Acetonitrile	1	3	X	1
Acetophenetidine	4	2	X	1
Acetophenone	1	4	4	4
Acetotoluidide	4	2	X	1
Acetyl Acetone	1	4	4	4
Acetyl Bromide	1	4	4	1
Acetyl Chloride	4	4	4	1
Acetylene	1	1	2	1
Acetylene Tetrabromide	1	4	X	1
Acetylene Tetrachloride	1	4	X	1
Acetylsalicylic Acid	4	2	X	1
Acids, Non-organic	X	X	X	X
Acids, Organic	X	X	X	X
Aconitic Acid	X	X	X	X
Acridine	X	X	X	X
Acrolein	1	3	2	3
Acrylic Acid	4	2	X	1
Acrylonitrile	4	4	4	3
Adipic Acid	2	1	X	X
Aero Lubriplate	4	1	2	1
Aero Shell 17 Grease	4	1	2	1
Aero Shell 750	4	2	4	1
Aero Shell 7A Grease	4	2	2	1
Aero Shell IAC	4	1	2	1
Aerosafe 2300	1	4	3	4
Aerosafe 2300W	1	4	3	4
Aerozene 50 (50% Hydrazine 50% UDMH)	1	3	4	4
Air, Below 200° F	1	2	1	1
Air, 200 - 300° F	2	3	1	1
Air, 300 - 400° F	4	4	1	1

Air, 400 - 500° F	4	4	2	3
Aliphatic Dicarboxylic Acid	4	2	X	1
Alkanes (Paraffin Hydrocarbons)	4	1	2	1
Alkanesulfonic Acid	4	1	2	1
Alkazene	4	4	4	2
Alkenes (Olefin Hydrocarbons)	4	2	X	1
Alkyl Acetone	1	3	2	3
Alkyl Alcohol	4	1	2	1
Alkyl Amine	4	1	2	1
Alkyl Aryl Sulfonates	4	1	2	1
Alkyl Aryl Sulfonics	4	1	2	1
Alkyl Benzene	4	2	X	1
Alkyl Chloride	4	2	X	1
Alkyl Sulfide	4	2	X	1
Alkylnaphthalene Sulfonic Acid	4	1	2	1
Allyl Chloride	4	2	X	1
Allylidene Diacetate	1	3	2	3
Alpha Picoline	1	3	2	3
Aluminum Acetate	1	2	4	4
Aluminum Bromide	1	1	1	1
Aluminum Chlorate	1	3	2	3
Aluminum Chloride	1	1	2	1
Aluminum Ethylate	X	X	X	X
Aluminum Fluoride	1	1	2	1
Aluminum Fluorosilicate	X	X	X	X
Aluminum Formate	1	3	2	3
Aluminum Hydroxide	1	2	2	2
Aluminum Linoleate	4	1	2	1
Aluminum Nitrate	1	1	2	1
Aluminum Oxalate	1	3	2	3
Aluminum Phosphate	1	1	2	1
Aluminum Potassium Sulfate	1	3	2	3
Aluminum Salts	1	1	1	1
Aluminum Sodium Sulfate	1	3	2	3
Aluminum Sulfate	1	1	1	1
Alums-NH3 -Cr -K	1	1	1	4
Ambrex 33 (Mobil)	4	1	4	1
Ambrex 830 (Mobil)	3	1	2	1
Amines-Mixed	2	4	2	4
Aminoanthraquinone	X	X	X	X
Aminoazobenzene	X	X	X	X
Aminobenzene Sulfonic Acid	X	X	X	X
Aminobenzoic Acid	X	X	X	X
Aminopyridine	X	X	X	X
Aminosalicylic Acid	X	X	X	X
Ammonia (Anhydrous)	1	2	2	4
Ammonia and Lithium Metal in Solution	2	2	4	4
Ammonia, Gas, Cold	1	1	1	4

Ammonia, Gas, Hot	2	4	X	4
Ammonia, Liquid (Anhydrous)	1	2	2	4
Ammonium Acetate	1	3	2	3
Ammonium Arsenate	1	3	2	3
Ammonium Benzoate	1	3	2	3
Ammonium Bicarbonate	1	3	2	3
Ammonium Bisulfite	1	3	2	3
Ammonium Bromide	1	1	X	1
Ammonium Carbamate	1	3	2	3
Ammonium Carbonate	1	4	X	1
Ammonium Chloride, 2N	1	1	X	1
Ammonium Citrate	1	3	2	3
Ammonium Dichromate	1	3	2	3
Ammonium Diphosphate	1	3	2	3
Ammonium Fluoride	1	1	X	1
Ammonium Fluorosilicate	X	X	X	X
Ammonium Formate	1	3	2	3
Ammonium Hydroxide, 3 Molar	1	1	1	3
Ammonium Hydroxide, Concentrated	1	4	1	4
Ammonium Iodide	1	1	X	1
Ammonium Lactate	1	3	2	3
Ammonium Metaphosphate	1	3	2	3
Ammonium Molybdenate	1	3	2	3
Ammonium Nitrate, 2N	1	1	X	X
Ammonium Nitrite	1	1	2	X
Ammonium Oxalate	1	3	2	3
Ammonium Perchlorate	1	3	2	3
Ammonium Perchloride	X	X	X	X
Ammonium Persulfate 10%	1	4	X	X
Ammonium Persulfate Solution	1	4	X	X
Ammonium Phosphate	1	1	1	4
Ammonium Phosphate, Dibasic	1	1	1	X
Ammonium Phosphate, Mono-Basic	1	1	1	X
Ammonium Phosphate, Tribasic	1	1	1	X
Ammonium Phosphite	1	3	2	3
Ammonium Picrate	1	3	2	3
Ammonium Polysulfide	1	3	2	3
Ammonium Salicylate	1	3	2	3
Ammonium Salts	1	1	1	3
Ammonium Sulfamate	1	3	2	3
Ammonium Sulfate	1	1	X	4
Ammonium Sulfate Nitrate	1	1	X	4
Ammonium Sulfide	1	1	X	4
Ammonium Sulfite	1	3	2	3
Ammonium Thiocyanate	1	3	2	3
Ammonium Thioglycolate	1	3	2	3
Ammonium Thiosulfate	1	3	2	3

Ammonium Tungstate	1	3	2	3
Ammonium Valerate	1	3	2	3
Amyl Acetate	3	1	4	4
Amyl Alcohol	1	2	4	2
Amyl Borate	4	1	X	1
Amyl Butyrate	4	1	2	1
Amyl Chloride	4	X	4	1
Amyl Chloronaphthalene	4	4	4	1
Amyl Cinnamic Aldehyde	4	2	X	1
Amyl Laurate	4	2	X	1
Amyl Mercaptan	4	2	X	1
Amyl Naphthalene	4	4	4	1
Amyl Nitrate	1	3	2	3
Amyl Nitrite	1	3	2	3
Amyl Phenol	X	X	X	X
Amyl Propionate	4	1	2	1
Anderol, L- 826 (di-ester)	4	2	4	1
Anderol, L- 829 (di-ester)	4	2	4	1
Anderol, L-774 (di-ester)	4	2	4	1
ANG-25 (Di-ester Base) (TG749)	4	2	2	1
ANG-25 (Glyceral Ester)	1	2	2	1
Aniline	2	4	4	3
Aniline Dyes	2	4	3	2
Aniline Hydrochloride	2	2	3	2
Aniline Oil	2	4	4	3
Aniline Sulfate	1	3	2	3
Aniline Sulfite	1	3	2	3
Animal Fats	2	1	X	1
Animal Oil (Lard Oil)	2	1	2	1
Anisole	X	X	X	X
Anisoyl Chloride	X	X	X	X
AN-O-3 Grade M	4	1	2	1
AN-O-366	4	1	4	1
AN-O-6	4	1	4	1
Ansul Ether 161 or 181	3	3	4	4
Anthracene	4	2	X	1
Anthranilic Acid	X	X	X	X
Anthraquinone	X	X	X	X
Anti-freeze Solutions	1	3	2	3
Antimony Chloride	4	1	4	1
Antimony Pentachloride	4	1	4	1
Antimony Pentafluoride	X	X	X	X
Antimony Sulfate	X	X	X	X
Antimony Tribromide	4	1	4	1
Antimony Trichloride	4	1	4	1
Antimony Trifluoride	4	1	4	1
Antimony Trioxide	4	1	4	1
AN-VV-O-366b Hydr. Fluid	4	1	4	1
Aqua Regia	3	4	X	2

Arachidic Acid	X	X	X	X
Argon	1	1	1	1
Aroclor, 1248	2	3	2	1
Aroclor, 1254	2	4	3	1
Aroclor, 1260	X	1	1	1
Aromatic Fuel -50%	4	2	4	1
Arsenic Acid	1	1	1	1
Arsenic Oxide	X	X	X	X
Arsenic Trichloride	4	1	X	4
Arsenic Trioxide	4	1	X	4
Arsenic Trisulfide	4	1	X	4
Arsenites	X	X	X	X
Arsine	X	X	X	X
Aryl Orthosilicate	X	X	X	X
Ascorbic Acid	1	3	2	3
Askarel Transformer Oil	4	2	4	1
Aspartic Acid	1	3	2	3
Asphalt	4	2	4	1
ASTM Oil, No. 1	4	1	1	1
ASTM Oil, No. 2	4	1	4	1
ASTM Oil, No. 3	4	1	3	1
ASTM Oil, No. 4	4	2	4	1
ASTM Oil, No. 5	4	1	X	1
ASTM Reference Fuel A	4	1	4	1
ASTM Reference Fuel B	4	1	4	1
ASTM Reference Fuel C	4	2	4	1
ASTM Reference Fuel D	4	2	X	1
ATL-857	4	2	4	1
Atlantic Dominion F	4	1	4	1
Atlantic Utro Gear-e	4	1	X	1
Atlantic Utro Gear-EP Lube	4	1	4	1
Aure 903R (Mobil)	4	1	4	1
AUREX 256	X	X	X	X
Automatic Transmission Fluid	4	1	4	1
Automotive Brake Fluid	1	3	3	4
AXAREL 9100	X	X	X	X
Azobenzene	X	X	X	X
Bardol B	4	4	4	1
Barium Carbonate	1	3	2	3
Barium Chlorate	1	3	2	3
Barium Chloride	1	1	1	1
Barium Cyanide	1	1	1	1
Barium Hydroxide	1	1	1	1
Barium Iodide	1	1	1	1
Barium Nitrate	1	3	2	3
Barium Oxide	1	1	1	1
Barium Peroxide	1	3	2	3
Barium Polysulfide	1	3	2	3
Barium Salts	1	1	1	1

Barium Sulfate	1	1	X	1
Barium Sulfide	1	1	1	1
Bayol 35	4	1	4	1
Bayol D	4	1	4	1
Beer	1	1	1	1
Beet Sugar Liquids	1	1	X	1
Beet Sugar Liquors	1	1	1	1
Benzaldehyde	1	4	2	4
Benzaldehyde Disulfonic Acid	X	X	X	X
Benzamide	4	2	X	1
Benzanthrone	4	2	X	1
Benzene	4	4	4	1
Benzene Hexachloride	X	X	X	X
Benzenesulfonic Acid 10%	4	4	4	1
Benzidine	4	2	X	1
Benzidine 3 Sulfonic Acid	4	2	X	1
Benzil	4	2	X	1
Benzilic Acid	4	2	X	1
Benzine (Ligroin)	4	1	4	1
Benzocatechol	4	2	X	1
Benzochloride	1	4	X	1
Benzoic Acid	4	4	4	1
Benzoin	4	2	X	1
Benzonitrile	1	3	2	3
Benzophenone	2	X	X	1
Benzoquinone	2	X	X	1
Benzotrichloride	1	4	X	1
Benzotrifluoride	1	4	X	1
Benzoyl Chloride	X	X	X	1
Benzoyl Peroxide	X	X	X	X
Benzoylsulfonilic Acid	4	2	X	1
Benzyl Acetate	1	3	2	3
Benzyl Alcohol	2	4	2	1
Benzyl Amine	X	X	X	X
Benzyl Benzoate	4	4	4	1
Benzyl Bromide	4	4	4	1
Benzyl Butyl Phthalate	1	3	2	3
Benzyl Chloride	4	4	4	1
Benzyl Phenol	4	2	X	1
Benzyl Salicylate	4	2	X	1
Beryllium Chloride	1	1	3	1
Beryllium Fluoride	1	1	3	1
Beryllium Oxide	1	1	3	1
Beryllium Sulfate	1	3	2	3
Bismuth Carbonate	1	3	2	3
Bismuth Nitrate	1	3	2	3
Bismuth Oxychloride	1	3	2	3
Bittern	X	X	X	X
Black Liquor	1	2	X	1

Black Point 77	1	1	3	1
Blast Furnace Gas	4	4	1	1
Bleach Liquor	1	3	2	1
Bleach Solutions	1	X	X	1
Borax	1	2	2	1
Borax Solutions	1	X	X	1
Bordeaux Mixture	1	2	2	1
Boric Acid	1	1	1	1
Boric Oxide	1	3	2	3
Borneol	4	2	X	1
Bornyl Acetate	4	2	X	1
Bornyl Chloride	4	2	X	1
Bornyl Formate	4	2	X	1
Boron Fluids (HEF)	4	2	4	1
Boron Hydride	X	X	X	X
Boron Phosphate	X	X	X	X
Boron Tribromide	X	X	X	X
Boron Trichloride	X	X	X	X
Boron Trifluoride	X	X	X	X
Boron Trioxide	X	X	X	X
Brake Fluid DOT3 (Glycol Type)	1	3	3	4
Bray GG-130	4	2	4	1
Brayco 719-R (VV-H-910)	1	3	2	4
Brayco 885 (MIL-L-6085A)	4	2	4	1
Brayco 910	1	2	4	4
Bret 710	1	2	4	4
Brine	1	1	X	1
Brine (Seawater)	3	1	X	1
Brom - 113	4	3	4	X
Brom - 114	4	2	4	2
Bromic Acid	1	3	2	3
Bromine	4	4	4	1
Bromine Pentafluoride	4	4	4	4
Bromine Trifluoride	4	4	4	4
Bromine Water	2	4	4	1
Bromobenzene	4	4	4	1
Bromobenzene Cyanide	1	3	2	3
Bromochlorotrifluoroethane (Halothane)	4	4	4	1
Bromoform	4	2	X	1
Bromomethane (Methyl Bromide)	4	2	X	1
Bromotrifluoroethylene (BFE)	X	X	X	X
Bromotrifluoromethane (F-13B1)	X	X	X	X
Brucine Sulfate	1	3	2	3
Buffered Oxide Etchants	X	X	X	X
Bunker Oil	4	1	2	1
Bunker's "C" (Fuel Oil)	X	1	X	1
Butadiene (Monomer)	4	4	4	1
Butane	4	1	4	1

Butane, 2, 2-Dimethyl	4	1	4	1
Butane, 2, 3-Dimethyl	4	1	4	1
Butanediol	1	3	2	3
Butanol (Butyl Alcohol)	2	1	2	1
Butene 2-Ethyl (1-Butene 2-Ethyl)	4	1	4	1
Butter-Animal Fat	1	1	2	1
Butyl Acetate or n-Butyl Acetate	2	4	X	4
Butyl Acetyl Ricinoleate	1	2	X	1
Butyl Acrylate	1	4	2	4
Butyl Alcohol	2	1	2	1
Butyl Alcohol (Secondary)	2	2	2	1
Butyl Alcohol (Tertiary)	2	2	2	1
Butyl Amine or N-Butyl Amine	3	1	4	4
Butyl Benzoate	1	3	2	3
Butyl Benzoate or n-Butyl Benzoate	1	4	X	1
Butyl Benzolate	X	X	X	X
Butyl Butyrate or n-Butyl Butyrate	1	4	X	1
Butyl Carbitol	1	4	4	3
Butyl Cellosolve	2	3	X	4
Butyl Cellosolve Acetate	1	3	2	3
Butyl Cellosolve Adipate	2	4	2	2
Butyl Chloride	4	1	2	1
Butyl Ether or n-Butyl Ether	3	3	X	4
Butyl Glycolate	1	3	2	3
Butyl Lactate	1	3	2	3
Butyl Laurate	1	3	2	3
Butyl Mercaptan (Tertiary)	4	4	X	1
Butyl Methacrylate	1	3	2	3
Butyl Oleate	2	4	X	1
Butyl Oxalate	1	3	2	3
Butyl Stearate	4	2	X	1
Butylbenzoic Acid	4	2	X	1
Butylene	4	2	4	1
Butyraldehyde	2	4	4	4
Butyric Acid	2	4	X	2
Butyric Anhydride	1	3	2	3
Butyrolactone	1	3	2	3
Butyryl Chloride	4	2	X	1
Cadmium Chloride	1	3	2	3
Cadmium Cyanide	1	3	2	3
Cadmium Nitrate	1	3	2	3
Cadmium Oxide	1	3	2	3
Cadmium Sulfate	1	3	2	3
Cadmium Sulfide	1	3	2	3
Calcine Liquors	1	1	X	1
Calcium Acetate	1	2	4	4
Calcium Arsenate	1	3	2	3
Calcium Benzoate	4	2	X	1



Calcium Bicarbonate	1	3	2	3
Calcium Bisulfide	1	3	2	3
Calcium Bisulfite	1	2	3	2
Calcium Bromide	1	1	1	1
Calcium Carbide	X	X	X	X
Calcium Carbonate	1	1	1	1
Calcium Chlorate	1	3	2	3
Calcium Chloride	1	1	1	1
Calcium Chromate	1	3	2	3
Calcium Cyanamide	X	X	X	X
Calcium Cyanide	1	1	1	X
Calcium Fluoride	1	1	1	1
Calcium Gluconate	1	3	2	3
Calcium Hydride	1	1	1	1
Calcium Hydrosulfide	1	3	2	3
Calcium Hydroxide	1	1	1	1
Calcium Hypochlorite	1	2	2	1
Calcium Hypophosphite	1	3	2	3
Calcium Lactate	1	3	2	3
Calcium Naphthenate	X	X	X	X
Calcium Nitrate	1	1	2	1
Calcium Oxalate	1	3	2	3
Calcium Oxide	1	1	1	1
Calcium Permanganate	X	X	X	X
Calcium Peroxide	X	X	X	X
Calcium Phenolsulfonate	1	3	2	3
Calcium Phosphate	1	1	1	1
Calcium Phosphate Acid	1	3	2	3
Calcium Propionate	1	3	2	3
Calcium Pyridine Sulfonate	X	X	X	X
Calcium Salts	1	1	2	1
Calcium Silicate	1	1	X	1
Calcium Stearate	4	2	X	1
Calcium Sulfamate	4	2	X	1
Calcium Sulfate	1	3	2	3
Calcium Sulfide	1	1	1	1
Calcium Sulfite	1	1	1	1
Calcium Thiocyanate	1	3	2	3
Calcium Thiosulfate	1	2	1	1
Calcium Tungstate	1	3	2	3
Caliche Liquors	1	1	2	1
Camphene	4	2	X	1
Camphor	4	2	X	1
Camphoric Acid	4	2	X	1
Cane Sugar Liquors	1	1	1	1
Capric Acid	4	1	2	1
Caproic Acid	4	1	2	1
Caproic Aldehyde	2	X	2	4
Caprolactam	4	1	2	1
Capronaldehyde	4	1	2	1

Carbamate	2	3	X	1
Carbazole	X	X	X	X
Carbitol	2	2	2	2
Carbolic Acid (Phenol)	2	4	4	1
Carbon Bisulfide	4	4	4	1
Carbon Dioxide	1	1	1	1
Carbon Dioxide (Explosive Decompression Use)	1	1	1	1
Carbon Disulfide	4	4	4	1
Carbon Fluorides	4	2	4	1
Carbon Monoxide	1	1	1	1
Carbon Tetrabromide	X	X	X	X
Carbon Tetrachloride	4	2	4	1
Carbon Tetrafluoride	4	2	4	1
Carbonic Acid	1	2	1	1
Casein	1	3	2	3
Castor Oil	2	1	1	1
Caustic Lime	1	3	2	3
Caustic Potash	1	3	2	3
Caustic Soda (Sodium Hydroxide)	1	3	2	3
Cellosolve	2	4	4	4
Cellosolve, Acetate	2	4	4	4
Cellosolve, Butyl	2	4	4	4
Cellugard	1	1	1	1
Cellulose Acetate	1	3	2	3
Cellulose Acetate Butyrate	1	3	2	3
Cellulose Ether	1	3	2	3
Cellulose Nitrate	1	3	2	3
Cellulose Tripropionate	1	3	2	3
Cellulube (Phosphate Esters)	X	X	X	X
Cellutherm 2505A	4	2	4	1
Cerium Sulfate	1	3	2	3
Cerous Chloride	1	3	2	3
Cerous Fluoride	1	3	2	3
Cerous Nitrate	1	3	2	3
Cetane (Hexadecane)	4	1	4	1
Cetyl Alcohol	4	1	2	1
Chaulmoogric Acid	X	X	X	X
China Wood Oil (Tung Oil)	4	1	4	1
Chloral	1	3	2	3
Chloramine	X	X	X	X
Chloranthraquinone	4	2	X	1
Chlordane	4	2	4	1
Chlorextol	4	2	4	1
Chloric Acid	1	3	2	3
Chlorinated Solvents, Dry	4	4	4	1
Chlorinated Solvents, Wet	4	4	4	1
Chlorine (Dry)	4	2	X	1
Chlorine (Plasma)	X	X	X	X
Chlorine (Wet)	X	X	X	X
Chlorine Dioxide	3	4	X	1

Chlorine Dioxide, 8% Cl as NaClO <sub>2</sub> in solution	4	4	X	1
Chlorine Trifluoride	4	4	4	4
Chlorine Water	2	3	X	1
Chloro 1-Nitro Ethane (1-Chloro 1-Nitro Ethane)	4	4	4	4
Chloro Oxyfluorides	X	X	X	X
Chloro Xylenols	4	2	X	1
Chloroacetaldehyde	1	3	2	3
Chloroacetic Acid	2	4	X	4
Chloroacetone	1	4	4	4
Chloroacetyl Chloride	X	X	X	X
Chloroamino Benzoic Acid	1	3	2	3
Chloroaniline	1	3	2	3
Chlorobenzaldehyde	1	3	2	3
Chlorobenzene	4	4	4	1
Chlorobenzene (Mono)	4	4	4	1
Chlorobenzene Chloride	4	2	X	1
Chlorobenzene Trifluoride	4	2	X	1
Chlorobenzochloride	4	2	X	1
Chlorobenzotrifluoride	4	2	X	1
Chlorobromo Methane	2	4	4	1
Chlorobromopropane	4	2	X	1
Chlorobutadiene	4	4	4	1
Chlorobutane (Butyl Chloride)	4	1	2	1
Chlorododecane	4	4	4	1
Chloroethane	4	1	2	1
Chloroethane Sulfonic Acid	1	3	2	3
Chloroethylbenzene	4	2	X	1
Chloroform	4	4	4	1
Chlorohydrin	1	3	2	3
Chloronaphthalene or o-Chloronaphthalene	4	4	4	1
Chloronitrobenzene	1	3	2	3
Chlorophenol or o-Chlorophenol	4	4	4	1
Chloropicrin	4	2	X	1
Chloroprene	4	2	X	1
Chlorosilanes	X	X	X	X
Chlorosulfonic Acid	4	4	4	4
Chlorotoluene	4	4	4	1
Chlorotoluene Sulfonic Acid	1	3	2	3
Chlorotoluidine	4	2	X	1
Chlorotrifluoroethylene (CTFE)	X	X	X	X
Chlorox	2	2	X	1
Chloroxylols	X	X	X	X
Cholesterol	4	2	X	1
Chrome Alum	1	1	1	1
Chrome Plating Solutions	2	4	2	1
Chromic Acid	2	4	X	1
Chromic Chloride	X	X	X	X
Chromic Fluorides	X	X	X	X
Chromic Hydroxide	X	X	X	X

Chromic Nitrates	X	X	X	X
Chromic Oxide	2	4	X	1
Chromic Phosphate	X	X	X	X
Chromic Sulfate	X	X	X	X
Chromium Potassium Sulfate (Alum)	2	2	X	1
Chromyl Chlorides	X	X	X	X
Cinnamic Acid	4	2	X	1
Cinnamic Alcohol	4	2	X	1
Cinnamic Aldehyde	4	2	X	1
Circo Light Process Oil	4	1	4	1
Citric Acid	1	1	1	1
City Service #65 #120 #250	4	1	4	1
City Service Koolmoter-AP Gear Oil 140-EP Lube	4	1	4	1
City Service Pacemaker #2	4	1	4	1
Clorox	2	2	X	1
Coal Tar	X	1	X	1
Cobalt Chloride	1	1	2	1
Cobalt Chloride, 2N	1	1	1	1
Cobaltous Acetate	1	3	2	3
Cobaltous Bromide	1	1	1	1
Cobaltous Linoleate	X	X	X	X
Cobaltous Naphthenate	X	X	X	X
Cobaltous Sulfate	1	3	2	3
Coconut Oil	3	1	1	1
Cod Liver Oil	1	1	2	1
Codeine	4	2	X	1
Coffee	1	1	1	1
Coke Oven Gas	4	4	2	1
Coliche Liquors	2	2	X	X
Convelex 10	X	4	4	X
Coolanol 20 25R 35R 40& 45A (Monsanto)	3	1	4	1
Copper Acetate	1	2	4	4
Copper Ammonium Acetate	1	3	2	3
Copper Carbonate	1	3	2	3
Copper Chloride	1	1	1	1
Copper Cyanide	1	1	1	1
Copper Gluconate	1	3	2	3
Copper Naphthenate	X	X	X	X
Copper Nitrate	2	2	X	1
Copper Oxide	1	1	1	1
Copper Salts	1	1	1	1
Copper Sulfate	1	1	1	1
Copper Sulfate 10%	1	1	1	1
Copper Sulfate 50%	1	1	1	1
Corn Oil	3	1	1	1
Cottonseed Oil	3	1	1	1
Creosote, Coal Tar	4	1	4	1
Creosote, Wood	4	1	4	1
Cresol (Methyl Phenol)	X	X	X	1

Cresols	4	4	4	2
Cresylic Acid	4	4	4	1
Crotonaldehyde	4	2	X	1
Crotonic Acid	4	2	X	1
Crude Oil	4	2	4	1
Cumaldehyde	4	2	X	1
Cumene	4	4	4	1
Cumene Hydroperoxide	X	X	X	X
Cupric Sulfate	2	2	X	1
Cutting Oil	4	1	4	1
Cyanamide	X	X	X	X
Cyanides	X	X	X	X
Cyanogen Chloride	X	X	X	X
Cyanogen Gas	X	X	X	X
Cyanohydrin	X	X	X	X
Cyanuric Chloride	X	X	X	X
Cyclohexane	4	1	4	1
Cyclohexanol	4	1	4	1
Cyclohexanone	2	4	4	4
Cyclohexene	4	2	X	1
Cyclohexylamine	4	1	2	1
Cyclohexylamine Carbonate	X	X	X	X
Cyclohexylamine Laurate	4	1	2	1
Cyclopentadiene	4	2	X	1
Cyclopentane	4	1	4	1
Cyclopolylefins	4	1	4	1
Cymene or p-Cymene	4	4	4	1
DDT (Dichlorodiphenyltrichloroethane)	4	2	X	1
Decalin	4	4	4	1
Decane	4	1	2	1
Delco Brake Fluid	1	3	3	4
Denatured Alcohol	1	1	1	1
Detergent, Water Solution	1	1	1	1
Developing Fluids (Photo)	2	1	1	1
Dexron	4	1	4	1
Dextrin	4	1	2	1
Dextro Lactic Acid	1	3	2	3
Dextron	4	1	X	1
Dextrose	1	3	2	3
DI Water	1	2	2	2
Diacetone	1	4	4	4
Diacetone Alcohol	1	4	4	4
Dialkyl Sulfates	1	3	2	3
Diallyl Ether	X	X	X	X
Diallyl Phthalate	X	X	X	X
Diamylamine	4	1	2	1
Diazinon	4	3	4	2
Dibenzyl (sym-Diphenylethane)	4	2	X	1
Dibenzyl Ether	2	4	X	4

Dibenzyl Sebacate	2	4	3	2
Diborane	X	X	X	X
Dibromoethane	4	2	X	1
Dibromoethyl Benzene	4	4	4	1
Dibutyl Cellosolve Adipate	1	3	2	3
Dibutyl Ether	3	4	4	3
Dibutyl Methyleneedithio Glycolate	4	2	X	1
Dibutyl Phthalate	2	4	2	3
Dibutyl Sebacate	2	4	2	2
Dibutyl Thioglycolate	4	2	X	1
Dibutyl Thiourea	4	2	X	1
Dibutylamine	1	4	3	4
Dichloroacetic Acid	4	2	X	1
Dichloroaniline	1	3	2	3
Dichlorobenzene or o-Dichlorobenzene	4	4	X	1
Dichlorobenzene or p-Dichlorobenzene	4	4	X	1
Dichlorobutane	4	2	4	1
Dichlorobutene	4	2	X	1
Dichlorodiphenyl-Dichloroethane (DDD)	4	2	X	1
Dichloroethane	4	2	X	1
Dichloroethylene	4	2	X	1
Dichlorohydrin	1	3	2	3
Dichloroisopropyl Ether	3	4	4	3
Dichloromethane	4	2	X	1
Dichlorophenol	4	2	X	1
Dichlorophenoxyacetic Acid	4	2	X	1
Dichloropropane	4	2	X	1
Dichloropropene	4	2	X	1
Dichlorosilane	X	X	X	X
Dicyclohexylamine	4	1	2	4
Dicyclohexylammonium Nitrate	1	3	2	3
Dieldrin	4	2	X	1
Diesel Oil	4	1	4	1
Di-ester Lubricant MIL-L-7808	4	2	4	1
Di-ester Synthetic Lubricants	4	2	4	1
Diethanolamine (DEA)	1	3	2	3
Diethyl Benzene	X	X	X	1
Diethyl Carbonate	1	3	2	3
Diethyl Ether	4	4	4	4
Diethyl Phthalate	4	2	X	1
Diethyl Sebacate	2	2	2	2
Diethyl Sulfate	1	4	2	3
Diethylamine	1	2	2	4
Diethylaniline	1	3	2	3
Diethylene Glycol	1	1	2	1
Diethylenetriamine	X	X	X	X
Difluorodibromomethane	2	4	4	X
Difluoroethane	4	2	X	1
Difluoromonochloroethane	4	2	X	1

Diglycol Chloroformate	1	3	2	3
Diglycolic Acid	1	3	2	3
Dihydroxydiphenylsulfone	1	3	2	3
Diisobutyl Ketone	1	X	X	X
Diisobutylcarbinol	4	1	2	1
Diisobutylene	4	2	4	1
Diisooctyl Sebacate	3	3	3	2
Diisopropyl Ether (DIPE)	X	X	X	X
Diisopropyl Ketone	1	4	4	4
Diisopropylbenzene	4	2	X	1
Diisopropylidene Acetone	4	2	X	1
Dimethyl Acetamide	1	3	2	3
Dimethylaniline (Xylidine)	4	2	X	1
Dimethyldisulfide (DMDS)	4	1	2	1
Dimethyl Ether	2	1	X	2
Dimethyl Formaldehyde	1	3	2	3
Dimethyl Formamide (DMF)	1	2	2	4
Dimethylhydrazine	1	3	2	3
Dimethyl Phenyl Carbinol	4	2	X	1
Dimethyl Phenyl Methanol	4	2	X	1
Dimethyl Phthalate	2	4	X	2
Dimethyl Sulfoxide (DMSO)	1	3	2	3
Dimethyl Terephthalate (DMT)	4	2	X	1
Dimethylamine (DMA)	1	2	2	4
Dinitrochlorobenzene	4	2	X	1
Dinitrogen Tetroxide	X	X	X	X
Dinitrotoluene (DNT)	4	4	4	4
Diocetyl Phthalate	2	4	3	2
Diocetyl Sebacate	2	4	3	2
Diocetylamine	4	1	2	1
Dioxane	2	4	4	4
Dioxolane	2	4	4	4
Dipentene	4	2	4	1
Diphenyl	4	4	4	1
Diphenyl Oxides	4	4	3	1
Diphenylamine (DPA)	4	2	X	1
Diphenylene Oxide	X	X	X	X
Diphenylpropane	4	2	X	1
Disilane	X	X	X	X
Di-Tert-Butyl Peroxide	X	X	X	X
Dodecylbenzene	4	2	X	1
Dow Chemical 50-4	1	X	X	4
Dow Chemical ET378	X	4	4	X
Dow Chemical ET588	1	3	X	4
Dow Corning -11	1	2	2	1
Dow Corning 1208, 4050, 6620, F-60, XF-60	1	1	X	1
Dow Corning -1265 Fluorosilicone Fluid	1	2	1	1
Dow Corning -200	1	2	3	1
Dow Corning -220	1	1	X	1
Dow Corning -3	1	2	2	1

Dow Corning -33	1	2	3	1
Dow Corning -4	1	2	2	1
Dow Corning -44	1	2	3	1
Dow Corning -5	1	2	3	1
Dow Corning -510	1	2	3	1
Dow Corning -55	1	2	3	1
Dow Corning -550	1	2	3	1
Dow Corning -704	1	2	3	1
Dow Corning -705	1	2	3	1
Dow Corning -710	1	2	3	1
Dow Corning F-61	1	1	X	1
Dow Guard	1	1	1	1
Dowanol P Mix	X	X	X	X
Dowtherm, 209	1	3	3	4
Dowtherm, A	4	4	4	1
Dowtherm, E	4	4	4	1
Drinking Water	1	1	1	1
Dry Cleaning Fluids	4	3	4	1
DTE 20 Series, Mobil	4	2	4	1
DTE named series, Mobil, light-heavy	4	1	3	1
Elco 28-EP lubricant	4	1	2	1
Epichlorohydrin	2	4	4	4
Epoxy Resins	1	X	X	4
Erucic Acid	X	X	X	X
Esam-6 Fluid	1	X	X	4
Esso Fuel 208	4	1	4	1
Esso Golden Gasoline	4	2	4	1
Esso Motor Oil	4	1	4	1
Esso Transmission Fluid (Type A)	4	1	4	1
Esso WS2812 (MIL-L-7808A)	4	1	4	1
Esso XP90-EP Lubricant	4	1	4	1
Esstic 42, 43	4	1	4	1
Ethane	4	1	4	1
Ethanol	1	3	2	3
Ethanol Amine	1	2	2	4
Ethers	3	4	4	3
Ethoxyethyl Acetate (EGMEEA)	1	3	2	3
Ethyl Acetate-Organic Ester	2	4	2	4
Ethyl Acetoacetate	2	4	2	4
Ethyl Acrylate	2	4	2	4
Ethyl Alcohol	1	3	2	3
Ethyl Ammonium Dichloride	X	X	X	X
Ethyl Benzene	4	4	4	1
Ethyl Benzoate	4	4	4	1
Ethyl Bromide	4	2	X	1
Ethyl Cellosolve	2	4	4	4
Ethyl Cellulose	2	2	2	4
Ethyl Chloride	3	1	4	1
Ethyl Chlorocarbonate	2	4	4	1
Ethyl Chloroformate	2	4	4	4



Ethyl Ether	3	3	4	4
Ethyl Formate	2	4	X	1
Ethyl Hexanol	1	1	2	1
Ethyl Lactate	1	3	2	3
Ethyl Mercaptan	X	4	3	2
Ethyl Nitrite	1	3	2	3
Ethyl Oxalate	1	4	4	2
Ethyl Pentachlorobenzene	4	4	4	1
Ethyl Pyridine	4	2	X	1
Ethyl Silicate	1	1	X	1
Ethyl Stearate	4	2	X	1
Ethyl Sulfate	1	X	X	4
Ethyl Tertiary Butyl Ether	X	X	X	X
Ethyl Valerate	4	2	X	1
Ethylacrylic Acid	2	4	4	X
Ethylamine	1	3	2	3
Ethylcyclopentane	4	1	4	1
Ethylene	4	3	4	2
Ethylene Chloride	4	4	4	2
Ethylene Chlorohydrin	2	4	3	1
Ethylene Cyanohydrin	4	2	X	1
Ethylene Diamine	1	1	1	4
Ethylene Dibromide	3	4	4	1
Ethylene Dichloride	3	4	4	1
Ethylene Glycol	1	1	1	1
Ethylene Hydrochloride	3	4	4	1
Ethylene Oxide	3	4	4	4
Ethylene Oxide, (12%) and Ergon 12 (80%)	2	3	4	4
Ethylene Trichloride	3	4	4	1
Ethyleneimine	X	X	X	X
Ethylmorpholene Stannous Octoate (50/50 mixture)	2	4	X	4
Ethylmorpholine	4	2	X	1
Ethylsulfuric Acid	1	3	2	3
F-60 Fluid (Dow Corning)	1	1	4	1
F-61 Fluid (Dow Corning)	1	1	4	1
Fatty Acids	3	2	3	1
FC-43 Heptacosofluorotri- butylamine	1	1	1	1
FC75 & FC77 (Fluorocarbon)	1	1	1	2
Ferric Acetate	1	3	2	3
Ferric Ammonium Sulfate	1	3	2	3
Ferric Chloride	1	1	2	1
Ferric Ferrocyanide	1	3	2	3
Ferric Hydroxide	1	3	2	3
Ferric Nitrate	1	1	2	1
Ferric Persulfate	1	1	X	1
Ferric Sulfate	1	1	X	1
Ferrous Ammonium Citrate	1	3	2	3
Ferrous Ammonium Sulfate	1	3	2	3
Ferrous Carbonate	1	3	2	3

Ferrous Chloride	X	X	X	X
Ferrous Iodide	1	3	2	3
Ferrous Sulfate	1	3	2	3
Ferrous Tartrate	1	3	2	3
Fish Oil	4	2	X	1
Fisher Reagent	2	X	X	X
Fluorinated Cyclic Ethers	1	X	X	X
Fluorine (Gas)	X	X	X	X
Fluorine (Liquid)	4	4	X	2
Fluorobenzene	4	2	X	1
Fluoroboric Acid	1	1	X	X
Fluorocarbon Oils	1	X	X	X
Fluoroform (Trifluoromethane)	X	X	X	X
Fluorolube	1	1	1	2
Fluorophosphoric Acid	X	X	X	X
Fluorosilicic Acid	2	1	X	2
Fluorosulfonic Acid	X	X	X	X
Formaldehyde	2	3	2	4
Formamide	1	3	2	3
Formic Acid	1	X	X	4
Freon, 11	4	4	4	2
Freon, 112 (Tetrachlorodifluoroethane)	4	2	4	1
Freon, 113	4	1	4	2
Freon, 113 + High and Low Aniline Oil	X	1	X	X
Freon, 114	1	1	4	1
Freon, 114B2	4	2	4	2
Freon, 115, 116	1	1	X	2
Freon, 12	3	2	4	3
Freon, 12 and ASTM Oil #2 (50/50 Mixture)	4	2	4	1
Freon, 12 and Suniso 4G (50/50 Mixture)	4	2	4	1
Freon, 123 (Dichlorotrifluoroethane)	X	X	X	X
Freon, 124 (Chlorotetrafluoroethane)	X	X	X	X
Freon, 125 (Pentafluoroethane)	X	X	X	X
Freon, 13	1	1	4	1
Freon, 134a (Tetrafluoroethane)	X	X	X	X
Freon, 13B1	1	1	4	1
Freon, 14	1	1	4	1
Freon, 141b (Dichlorofluoroethane)	X	X	X	X
Freon, 142b	4	2	X	2
Freon, 152a (Difluoroethane)	X	X	X	X
Freon, 21	4	4	4	4
Freon, 218	1	1	X	1
Freon, 22 (Chlorodifluoroethane)	3	4	4	4
Freon, 22 and ASTM Oil #2 (50/50 Mixture)	4	4	4	2
Freon, 23 (Fluoroform)	X	X	X	X
Freon, 31	1	4	X	4
Freon, 32	1	1	X	4
Freon, 502	1	2	X	2

Freon, BF (R112)	4	2	4	1
Freon, C316	1	1	X	1
Freon, C318	1	1	X	2
Freon, K-142b	1	1	X	4
Freon, K-152a	1	1	X	4
Freon, MF (R11)	4	2	4	2
Freon, PCA (R113)	4	1	4	2
Freon, TA	2	1	X	3
Freon, TC	2	1	X	1
Freon, TF (R113)	4	1	4	2
Freon, TMC	3	2	X	1
Freon, T-P35	1	1	X	1
Freon, T-WD602	2	2	X	1
Fuel Oil, #6	4	2	1	1
Fuel Oil, 1, and 2	4	1	4	1
Fuel Oil, Acidic	4	1	1	1
Fumaric Acid	2	1	2	1
Fuming Sulphuric Acid (20/25% Oleum)	4	4	4	1
Furaldehyde	2	4	X	4
Furan (Furfuran)	3	4	X	1
Furfural (Furfuraldehyde)	2	4	4	4
Furfuraldehyde	2	4	4	4
Furfuryl Alcohol	2	4	4	X
Furoic Acid	X	X	X	X
Furyl Carbinol	2	4	4	X
Fyrquel 150 220 300 550	1	4	1	1
Fyrquel 90, 100, 500	1	4	X	1
Fyrquel A60	2	4	X	4
Gallic Acid	2	2	X	1
Gasoline	4	1	4	1
Gelatin	1	1	1	1
Germane (Germanium Tetrahydride)	X	X	X	X
Girling Brake Fluid	1	3	X	4
Glauber's Salt	2	4	X	1
Gluconic Acid	1	3	2	3
Glucose	1	1	1	1
Glue	X	X	X	X
Glutamic Acid	1	3	2	3
Glycerine (Glycerol)	1	1	1	1
Glycerol Dichlorohydrin	1	3	2	3
Glycerol Monochlorohydrin	1	3	2	3
Glycerol Triacetate	1	3	2	3
Glycerophosphoric Acid	1	3	2	3
Glyceryl Phosphate	1	3	2	3
Glycidol	1	3	2	3
Glycol Monoether	X	X	X	X
Glycolic Acid	1	3	2	3
Glycols	1	1	1	1
Glyoxylic Acid	1	3	2	3
Grease Petroleum Base	4	1	4	1

Green Sulfate Liquor	1	2	X	1
Gulf Endurance Oils	4	1	4	1
Gulf FR Fluids (Emulsion)	4	1	4	1
Gulf FR G-Fluids	1	1	1	1
Gulf FR P-Fluids	2	4	1	2
Gulf Harmony Oils	4	1	4	1
Gulf High Temperature Grease	4	1	4	1
Gulf Legion Oils	4	1	4	1
Gulf Paramount Oils	4	1	4	1
Gulf Security Oils	4	1	4	1
Gulfcrown Grease	4	1	4	1
Halothane	4	4	4	1
Halowax Oil	4	4	4	1
Hannifin Lube A	4	1	2	1
Heavy Water	1	1	1	X
HEF-2 (High Energy Fuel)	4	2	4	1
Helium	1	1	1	1
Heptachlor	4	2	X	1
Heptachlorobutene	4	2	X	1
Heptaldehyde (Heptanal)	4	1	2	1
Heptane or n-Heptane	4	1	4	1
Heptanoic Acid	4	1	2	1
Hexachloroacetone	1	3	2	3
Hexachlorobutadiene	4	2	X	1
Hexachlorobutene	4	2	X	1
Hexachloroethane	4	2	X	1
Hexaethyl Tetraphosphate	X	X	X	X
Hexafluoroethane (F-116)	X	X	X	X
Hexafluoroxylene	X	X	X	X
Hexafluoroxylene	X	X	X	X
Hexaldehyde or n-Hexaldehyde	1	4	2	4
Hexamethyldisilazane	X	X	X	X
Hexamethylene (Cyclohexane)	4	1	2	1
Hexamethylene Diammonium Adipate	4	2	X	1
Hexamethylenediamine	1	3	2	3
Hexamethylenetetramine	1	3	2	3
Hexane or n-Hexane	4	1	4	1
Hexene-1 or n-Hexene-1	4	2	4	1
Hexone (Methyl Isobutyl)	1	3	2	3
Hexyl Acetate	4	1	2	1
Hexyl Alcohol	3	1	2	1
Hexylene Glycol	1	3	2	3
Hexylresorcinol	4	2	X	1
High Viscosity Lubricant, H2	1	1	1	1
High Viscosity Lubricant, U4	1	1	1	1
HiLo MS #1	1	4	3	4
Houghto-Safe 1010 phosphate ester	1	4	3	1
Houghto-Safe 1055 phosphate ester	1	4	3	1
Houghto-Safe 1120 phosphate ester	2	4	3	1

Houghto-Safe 271 (Water & Glycol Base)	1	1	2	2
Houghto-Safe 416 & 500	1	1	X	X
Houghto-Safe 5040 (Water/Oil emulsion)	4	1	3	1
Houghto-Safe 620	1	1	2	2
Hydraulic Oil (Petroleum Base, Industrial)	4	1	2	1
Hydraulic Oils (Synthetic Base)	4	2	X	1
Hydrazine	1	2	2	4
Hydrazine (Anhydrous)	2	4	X	4
Hydrazine Dihydrochloride	1	3	2	3
Hydrazine Hydrate	1	3	2	3
Hydriodic Acid	4	2	X	1
Hydroabietyl Alcohol	X	X	X	X
Hydrobromic Acid	1	4	4	1
Hydrobromic Acid 40%	1	4	4	1
Hydrocarbons, Saturated	4	1	4	1
Hydrochloric Acid (cold) 37%	3	4	X	1
Hydrochloric Acid (hot) 37%	3	4	X	1
Hydrochloric Acid, 3 Molar to 158°F	1	2	4	1
Hydrochloric Acid, Concentrated Room Temp	2	2	X	1
Hydrochloric Acid, Concentrated to 158°F	4	4	4	1
Hydrocyanic Acid	1	2	3	1
Hydro-Drive MIH-10 (Petroleum Base)	4	1	2	1
Hydro-Drive MIH-50 (Petroleum Base)	4	1	2	1
Hydrofluoric Acid (Anhydrous)	X	X	X	X
Hydrofluoric Acid (conc.) Cold	X	X	X	X
Hydrofluoric Acid (conc.) Hot	4	4	X	3
Hydrofluorosilicic Acid	1	2	4	1
Hydrogen Bromide (Anhydrous)	X	X	X	X
Hydrogen Chloride (Anhydrous)	X	X	X	X
Hydrogen Chloride gas	1	4	X	1
Hydrogen Cyanide	X	X	X	X
Hydrogen Fluoride	X	X	X	X
Hydrogen Fluoride (Anhydrous)	1	4	X	4
Hydrogen Gas, Cold	1	1	3	1
Hydrogen Gas, Hot	1	1	3	1
Hydrogen Iodide (Anhydrous)	X	X	X	X
Hydrogen Peroxide	1	2	1	1
Hydrogen Peroxide 90%	3	4	2	1
Hydrogen Selenide	X	X	X	X
Hydrogen Sulfide, Dry, Cold	1	1	3	4
Hydrogen Sulfide, Dry, Hot	1	4	3	4
Hydrogen Sulfide, Wet, Cold	1	4	3	4
Hydrogen Sulfide, Wet, Hot	1	4	3	4
Hydrolube-Water/Ethylene Glycol	1	1	2	1
Hydroxycitronellal	X	X	X	1
Hydroquinol	4	4	X	1
Hydroquinone	2	3	X	2
Hydroxyacetic Acid	1	3	2	3

Hydyne	1	2	4	4
Hyjet	1	4	X	4
Hyjet IV and IVA	1	4	4	4
Hyjet S4	1	4	X	4
Hyjet W	1	4	X	4
Hypochlorous Acid	2	4	X	1
Indole	X	X	X	1
Industron FF44	4	1	4	1
Industron FF48	4	1	4	1
Industron FF53	4	1	4	1
Industron FF80	4	1	4	1
Insulin	1	3	2	3
Iodic Acid	1	3	2	3
Iodine	2	2	X	1
Iodine Pentafluoride	4	4	4	4
Iodoform	4	X	X	1
Isoamyl Acetate	1	3	2	3
Isoamyl Butyrate	1	3	2	3
Isoamyl Valerate	1	3	2	3
Isoboreol	X	X	X	1
Isobutane	4	1	2	1
Isobutyl Acetate	1	3	2	3
Isobutyl Alcohol	1	2	1	1
Isobutyl Chloride	4	4	X	1
Isobutyl Ether	4	2	X	4
Isobutyl Methyl Ketone	1	3	2	3
Isobutyl n-Butyrate	1	4	X	1
Isobutyl Phosphate	1	3	2	3
Isobutylene	X	X	X	1
Isobutyraldehyde	2	3	X	4
Isobutyric Acid	2	1	2	4
Isocrotyl Chloride	X	X	X	1
Isodecanol	4	1	2	1
Isododecane	4	1	4	1
Isoeugenol	4	1	2	1
Isooctane	4	1	4	1
Isopentane	4	1	2	1
Isophorone (Ketone)	2	4	4	4
Isopropanol	1	2	1	1
Isopropyl Acetate	2	4	4	4
Isopropyl Alcohol	1	2	1	1
Isopropyl Chloride	4	4	4	1
Isopropyl Ether	4	2	4	4
Isopropylacetone	1	3	2	3
Isopropylamine	1	3	2	3
Jet Fuel A	4	2	X	1
JP-10	4	3	4	1
JP-3 (MIL-J-5624)	4	1	X	1
JP-4 (MIL-T-5624)	4	1	4	1
JP-5 (MIL-T-5624)	4	1	4	1

JP-6 (MIL-J-25656)	4	1	4	1
JP-8 (MIL-T-83133)	4	1	4	1
JP-9 (MIL-F-81912)	4	3	4	1
JP-9 -11	4	4	4	1
JPX (MIL-F-25604)	4	1	X	4
Kel F Liquids	1	1	1	2
Kerosene (Similar to RP-1 and JP-1)	4	1	4	1
Keystone #87HX-Grease	4	1	4	1
Lacquer Solvents	4	4	4	4
Lacquers	4	4	4	4
Lactams-Amino Acids	2	4	X	4
Lactic Acid, Cold	1	1	1	1
Lactic Acid, Hot	4	4	2	1
Lactones (Cyclic Esters)	2	4	2	4
Lard Animal Fat	2	1	2	1
Lauric Acid	4	1	2	1
Lavender Oil	4	2	X	1
LB 135	1	1	X	1
Lead (Molten)	X	X	X	X
Lead Acetate	1	2	4	4
Lead Arsenate	1	3	2	3
Lead Azide	X	X	X	X
Lead Bromide	1	3	2	3
Lead Carbonate	1	3	2	3
Lead Chloride	1	3	2	3
Lead Chromate	1	3	2	3
Lead Dioxide	1	3	2	3
Lead Linoleate	1	3	2	3
Lead Naphthenate	X	X	X	X
Lead Nitrate	1	1	2	X
Lead Oxide	1	3	2	3
Lead Sulfamate	1	2	2	1
Lehigh X1169	4	1	4	1
Lehigh X1170	4	1	4	1
Light Grease	4	1	X	1
Ligroin (Petroleum Ether or Benzene)	4	1	4	1
Lime Bleach	1	1	X	1
Lime Sulfur	X	X	X	1
Lindol, Hydraulic Fluid (Phosphate ester type)	1	4	3	2
Linoleic Acid	4	2	2	2
Linseed Oil	3	1	1	1
Liquid Oxygen (LOX)	4	4	4	4
Liquid Petroleum Gas (LPG)	4	1	3	1
Liquimoly	4	1	4	1
Lithium Bromide (Brine)	1	3	2	3
Lithium Carbonate	1	3	2	3
Lithium Chloride	1	3	2	3
Lithium Citrate	1	3	2	3
Lithium Hydroxide	1	3	2	3

Lithium Hypochlorite	1	3	2	3
Lithium Nitrate	1	3	2	3
Lithium Nitrite	1	3	2	3
Lithium Perchlorate	1	3	2	3
Lithium Salicylate	1	3	2	3
Lithopone	1	3	2	3
Lubricating Oils (Crude & Refined)	4	2	X	1
Lubricating Oils (Synthetic)	X	X	X	1
Lubricating Oils, Di-ester	4	2	4	1
Lubricating Oils, petroleum	4	1	4	1
Lubricating Oils, SAE 10, 20, 30, 40, 50	4	1	4	1
Lye Solutions	1	2	2	2
Magnesium Chloride	1	1	1	1
Magnesium Hydroxide	1	2	X	1
Magnesium Salts	1	1	1	1
Magnesium Sulfite and Sulfate	1	1	1	1
Magnesium Trisilicate	X	X	X	X
Malathion	4	2	4	1
Maleic Acid	4	4	X	1
Maleic Anhydride	2	4	X	4
Maleic Hydrazide	1	3	2	3
Malic Acid	2	1	2	1
Mandelic Acid	1	3	2	3
Manganese Acetate	1	3	2	3
Manganese Carbonate	1	3	2	3
Manganese Chloride	1	3	2	3
Manganese Dioxide	1	3	2	3
Manganese Gluconate	1	3	2	3
Manganese Hypophosphite	1	3	2	3
Manganese Linoleate	1	3	2	3
Manganese Naphthenate	X	X	X	X
Manganese Phosphate	1	3	2	3
Manganese Sulfate	1	3	2	3
Manganous Chloride	1	3	2	3
Manganous Phosphate	1	3	2	3
Manganous Sulfate	1	3	2	3
Mannitol	1	3	2	3
MCS 312	4	4	1	1
MCS 352	1	4	3	4
MCS 463	1	4	3	4
MDI (Methylene di-p-phenylene isocyanate)	1	3	2	3
Mercaptan	4	1	2	1
Mercaptobenzothiazole (MBT)	X	X	X	1
Mercuric Acetate	1	3	2	3
Mercuric Chloride	1	1	X	1
Mercuric Cyanide	1	3	2	3
Mercuric Iodide	1	3	2	3
Mercuric Nitrate	1	3	2	3
Mercuric Sulfate	1	3	2	3



Mercuric Sulfite	1	3	2	3
Mercurous Nitrate	1	3	2	3
Mercury	1	1	X	1
Mercury Chloride	1	3	2	3
Mercury Fulminate	1	3	2	3
Mercury Salts	1	3	2	3
Mercury Vapors	1	1	X	1
Mesityl Oxide (Ketone)	2	4	4	4
Meta-Cresol	X	X	X	1
Metaldehyde	1	3	2	3
Meta-Nitroaniline	1	3	2	3
Meta-Toluidine	X	X	X	1
Methacrylic Acid	1	3	2	3
Methallyl Chloride	X	X	X	1
Methane	4	1	4	1
Methanol	1	4	1	4
Methoxychlor	X	X	X	X
Methoxyethanol (DGMMA)	1	3	2	3
Methyl Abietate	X	X	X	1
Methyl Acetate	2	4	4	4
Methyl Acetoacetate	2	4	2	4
Methyl Acetophenone	X	X	X	1
Methyl Acrylate	2	4	4	4
Methyl Alcohol	1	4	1	4
Methyl Amylketone	1	3	2	3
Methyl Anthranilate	X	X	X	1
Methyl Benzoate	4	4	4	1
Methyl Bromide	4	2	X	1
Methyl Butyl Ketone	1	4	4	4
Methyl Butyrate Cellosolve	1	3	2	3
Methyl Butyrate Chloride	1	3	2	3
Methyl Carbonate	4	4	4	1
Methyl Cellosolve	2	3	4	4
Methyl Cellulose	2	2	2	4
Methyl Chloride	3	4	4	1
Methyl Chloroacetate	1	3	2	3
Methyl Chloroform	4	4	X	1
Methyl Chloroformate	4	4	4	1
Methyl Chlorosilanes	X	X	X	X
Methyl Cyanide (Acetonitrile)	1	3	2	3
Methyl Cyclohexanone	4	1	2	1
Methyl Dichloride	X	X	X	1
Methyl Ether	4	1	1	1
Methyl Ethyl Ketone (MEK)	1	4	4	4
Methyl Ethyl Ketone Peroxide	4	4	2	4
Methyl Ethyl Oleate	X	X	X	1
Methyl Formate	2	4	X	X
Methyl Hexyl Ketone (2-Octanone)	1	3	2	3
Methyl Iodide	4	1	2	1
Methyl Isobutyl Ketone (MIBK)	3	4	4	4

Methyl Isocyanate	1	3	2	3
Methyl Isopropyl Ketone	2	4	4	4
Methyl Isovalerate	X	X	X	1
Methyl Lactate	1	3	2	3
Methyl Mercaptan	1	X	X	X
Methyl Methacrylate	4	4	4	4
Methyl Oleate	2	4	X	1
Methyl Pentadiene	X	X	X	1
Methyl Phenylacetate	X	X	X	1
Methyl Salicylate	2	4	X	X
Methyl Tertiary Butyl Ether (MTBE)	3	3	X	3
Methyl Valerate	X	X	X	1
Methyl-2-Pyrrolidone or n-Methyl-2-Pyrrolidone	2	X	X	X
Methylacrylic Acid	2	4	4	3
Methylal	X	X	X	X
Methylamine	1	3	2	3
Methylamyl Acetate	1	3	2	3
Methylcyclopentane	4	4	4	1
Methylene Bromide	X	X	X	1
Methylene Chloride	4	4	4	2
Methylene Iodide	X	X	X	1
Methylglycerol	1	3	2	3
Methylisobutyl Carbinol	4	1	2	1
Methylpyrrolidine	X	X	X	1
Methylpyrrolidone	X	X	X	1
Methylsulfuric Acid	1	3	2	3
MIL-A-6091	1	2	1	1
MIL-C-4339	4	1	3	1
MIL-C-7024	4	1	4	1
MIL-C-8188	4	2	4	2
MIL-E-9500	1	1	1	1
MIL-F-16884	4	1	4	1
MIL-F-17111	4	1	4	1
MIL-F-25558 (RJ-1)	4	1	4	1
MIL-F-25656	4	1	4	1
MIL-F-5566	1	2	1	1
MIL-F-81912 (JP-9)	4	3	4	1
MIL-F-82522 (RJ-4)	4	2	4	1
MIL-G-10924	4	1	4	1
MIL-G-15793	4	1	4	1
MIL-G-21568	1	1	4	1
MIL-G-25013	1	1	4	1
MIL-G-25537	4	1	4	1
MIL-G-25760	4	2	4	1
MIL-G-3278	4	2	4	1
MIL-G-3545	4	1	4	1
MIL-G-4343	3	2	3	1
MIL-G-5572	4	1	4	1
MIL-G-7118	4	2	4	1
MIL-G-7187	4	1	4	1

MIL-G-7421	4	2	4	1
MIL-G-7711	4	1	2	1
MIL-H-13910	1	1	4	1
MIL-H-19457	2	4	3	1
MIL-H-22251	1	2	4	X
MIL-H-27601	4	1	4	1
MIL-H-46170 -15°F to +400°F	4	1	4	1
MIL-H-46170 -20°F to +275°F	4	1	4	1
MIL-H-46170 -55°F to +275°F	4	1	4	1
MIL-H-46170 -65°F to +275°F	4	1	4	1
MIL-H-5606 -65°F to +235°F	4	1	4	1
MIL-H-5606 -65°F to +275°F	4	1	4	1
MIL-H-6083	4	1	4	1
MIL-H-7083	1	1	1	2
MIL-H-8446 (MLO-8515)	4	2	4	1
MIL-J-5161	4	2	4	1
Milk	1	1	1	1
MIL-L-15016	4	1	4	1
MIL-L-15017	4	1	4	1
MIL-L-17331	4	1	4	1
MIL-L-2104	4	1	4	1
MIL-L-21260	4	1	4	1
MIL-L-23699	4	2	4	1
MIL-L-25681	1	2	4	1
MIL-L-3150	4	1	4	1
MIL-L-6081	4	1	4	1
MIL-L-6082	4	1	3	1
MIL-L-6085	4	2	4	1
MIL-L-6387	4	2	4	1
MIL-L-7808	4	2	4	1
MIL-L-7870	4	1	4	1
MIL-L-9000	4	1	4	1
MIL-L-9236	4	2	4	1
MIL-O-3503	4	1	4	1
MIL-P-27402	1	2	4	X
MIL-R-25576 (RP-1)	4	1	4	1
MIL-S-3136, Type I Fuel	4	1	4	1
MIL-S-3136, Type II Fuel	4	2	4	1
MIL-S-3136, Type III Fuel	4	2	4	1
MIL-S-3136, Type IV Oil High Swell	4	1	2	1
MIL-S-3136, Type IV Oil Low Swell	4	1	3	1
MIL-S-3136, Type V Oil Medium Swell	4	1	2	1
MIL-S-81087	1	1	3	1
MIL-T-5624, JP-4, JP-5	4	1	4	1
MIL-T-83133	4	1	4	1
Mineral Oils	3	1	2	1
Mixed Acids	1	3	2	3
MLO-7277 Hydr.	4	3	4	1
MLO-7557	4	3	4	1
MLO-8200 Hydr.	4	2	4	1

MLO-8515	4	2	4	1
Mobil 24dte	4	1	X	1
Mobil 254 Lubricant	X	X	X	X
Mobil Delvac 1100, 1110, 1100, 1100	4	1	X	1
Mobil HF	4	1	X	1
Mobil Nivac 20, 30	1	1	X	1
Mobil SHC 500 Series	4	3	2	1
Mobil SHC 600 Series	4	3	3	1
Mobil Therm 600	4	1	X	1
Mobil Velocite c	4	1	X	1
Mobilgas WA200 ATF	4	1	X	1
Mobilgear 600 Series	3	3	1	1
Mobilgear SHC ISO Series	3	3	1	1
Mobilgrease HP	4	2	2	1
Mobilgrease HTS	4	2	2	1
Mobilgrease SM	4	2	2	1
Mobilith AW Series	4	2	2	1
Mobilith SHC Series	4	2	2	1
Mobiljet II Lubricant	X	X	X	X
Mobilmistlube Series	3	3	1	1
Mobiloil SAE 20	4	1	X	1
Mobilux	4	1	X	1
Molybdenum Disulfide Grease	4	1	X	1
Molybdenum Oxide	1	3	2	3
Molybdenum Trioxide	1	3	2	3
Molybdic Acid	1	3	2	3
Monobromobenzene	4	4	4	1
Monobromotoluene	X	X	X	1
Monobutyl Paracresol	X	X	X	X
Monochloroacetic Acid	1	3	2	3
Monochlorobenzene	4	4	4	1
Monochlorobutene	X	X	X	1
Monochlorohydrin	X	X	X	X
Monoethanolamine (MEA)	2	4	2	4
Monoethyl Amine	1	3	2	3
Monoisopropylamine	1	3	2	3
Monomethyl Aniline	1	4	2	2
Monomethyl Ether (Dimethyl Ether)	X	X	X	X
Monomethyl Ether (Methyl Ether)	4	1	X	1
Monomethyl Hydrazine	1	2	4	X
Monomethylamine (MMA)	1	3	2	3
Monomethylaniline	2	4	X	2
Mononitrotoluene	1	3	2	3
Mononitrotoluene & Dinitrotoluene (40/60 Mixture)	1	4	4	3
Monovinyl Acetylene	1	1	2	1
Mopar Brake Fluid	1	3	3	4
Morpholine	X	X	X	1
Motor Oils	4	1	2	1
Mustard Gas	X	X	X	X

Myristic Acid	X	X	X	1
Naphthalene	4	4	4	1
Naphthalene Chloride	X	X	X	1
Naphthalene Sulfonic Acid	X	X	X	1
Naphthalenic Acid	X	X	X	1
Naphthalonic Acid	X	X	X	1
Naphthenic Acid	4	2	4	1
Naphthylamine	X	X	X	X
Naptha	4	2	4	1
Natural Gas	4	1	4	1
Neatsfoot Oil	2	1	2	1
Neon	1	1	1	1
Neville Acid	2	4	4	1
Nickel Acetate	1	2	4	4
Nickel Ammonium Sulfate	1	3	2	3
Nickel Chloride	1	1	1	1
Nickel Cyanide	1	3	2	3
Nickel Nitrate	1	3	2	3
Nickel Salts	1	1	1	1
Nickel Sulfate	1	1	1	1
Nicotinamide (Niacinamide)	X	X	X	1
Nicotinamide Hydrochloride	1	3	2	3
Nicotine	X	X	X	1
Nicotine Sulfate	1	3	2	3
Niter Cake	1	1	1	1
Nitric Acid, Red Fuming	4	4	X	2
Nitric Acid, White Fuming	X	X	X	X
Nitric Acid (0 - 50%)	2	4	X	1
Nitric Acid (50 - 100%)	4	4	X	3
Nitric Acid 3 Molar to 158°F	2	4	4	3
Nitric Acid Concentrated Room Temp	4	X	X	2
Nitric Acid Concentrated to 158°F	4	4	4	4
Nitroaniline	1	3	2	3
Nitrobenzene	1	4	4	2
Nitrobenzoic Acid	1	3	2	3
Nitrocellulose	1	3	2	3
Nitrochlorobenzene	1	3	2	3
Nitrochloroform	1	3	2	3
Nitrodiethylaniline	1	3	2	3
Nitrodiphenyl Ether	X	X	X	X
Nitroethane	2	4	4	4
Nitrofluorobenzene	1	3	2	3
Nitrogen	1	1	1	1
Nitrogen Oxides	1	3	2	3
Nitrogen Tetroxide (N2O4)	4	4	4	4
Nitrogen Trifluoride	X	X	X	X
Nitroglycerine	1	3	2	3
Nitroglycerol	1	3	2	3
Nitroisopropylbenzene	1	3	2	3
Nitromethane	2	4	4	4

Nitrophenol	1	3	2	3
Nitropropane	2	4	4	4
Nitrosyl Chloride	X	X	X	X
Nitrosylsulfuric Acid	X	X	X	X
Nitrothiophene	1	3	2	3
Nitrotoluene	1	3	2	3
Nitrous Acid	1	3	2	3
Nitrous Oxide	1	1	1	1
Nonane	4	1	2	1
Noryl GE Phenolic	1	1	X	X
Nyvac FR200 Mobil	1	1	X	1
Octachloro Toluene	4	4	4	1
Octadecane	4	1	4	1
Octanal (n-Octanaldehyde)	4	1	2	1
Octane or n-Octane	4	1	4	1
Octyl Acetate	1	3	2	3
Octyl Alcohol	3	2	2	1
Octyl Chloride	4	1	2	1
Octyl Phthalate	X	X	X	1
Olefins	X	X	X	1
Oleic Acid	4	3	4	2
Oleum (Fuming Sulfuric Acid)	4	4	4	1
Oleum Spirits	4	2	4	1
Oleyl Alcohol	X	X	X	1
Olive Oil	2	1	3	1
Oronite 8200	4	2	4	1
Oronite 8515	4	2	4	1
Ortho-Chloro Ethyl Benzene	4	4	4	1
Ortho-Chloroaniline	1	3	2	3
Ortho-Chlorophenol	1	3	2	3
Ortho-Cresol	1	3	2	3
Ortho-Dichlorobenzene	4	4	4	1
Ortho-Nitrotoluene	1	3	2	3
Orthophos Acid	X	X	X	X
OS 45 Type III (OS45)	4	2	4	1
OS 45 Type IV (OS45-1)	4	2	4	1
OS 70	4	2	4	1
Oxalic Acid	1	2	2	1
Oxygen, 200°-300°F (Evaluate for specific applications)	4	4	X	2
Oxygen, 300°-400°F (Evaluate for specific applications)	4	4	1	2
Oxygen, Cold (Evaluate for specific applications)	1	2	1	1
Oxygen, Liquid	4	4	X	4
Ozonated Deionized Water	1	3	2	3
Ozone	1	4	1	1
Paint Thinner, Duco	4	4	4	2
Palmitic Acid	2	1	4	1
Para-Aminobenzoic Acid	1	3	2	3
Para-Aminosalicylic Acid	1	3	2	3
Para-Bromobenzylphenyl Ether	X	X	X	X

Para-Chlorophenol	1	3	2	3
Paracymene	X	X	X	1
Para-Dichlorobenzene	4	4	4	1
Paraffins	4	1	2	1
Para-Formaldehyde	1	3	2	3
Paraldehyde	1	3	2	3
Par-al-Ketone	4	4	4	4
Para-Nitroaniline	1	3	2	3
Para-Nitrobenzoic Acid	1	3	2	3
Para-Nitrophenol	1	3	2	3
Parathion	X	X	X	1
Para-Toluene Sulfonic Acid	1	3	2	3
Parker O Lube	4	1	2	1
Peanut Oil	3	1	1	1
Pectin (Liquor)	X	X	X	1
Pelagonic Acid	X	X	X	X
Penicillin (Liquid)	X	X	X	1
Pentachloroethane	X	X	X	1
Pentachlorophenol	1	3	2	3
Pentaerythritol	1	3	2	3
Pentaerythritol Tetranitrate	1	3	2	3
Pentafluoroethane (F-125)	X	X	X	X
Pentane or n-Pentane	4	1	4	1
Pentane, 2 Methyl	4	1	4	1
Pentane, 2-4 dimethyl	4	1	4	1
Pentane, 3-Methyl	4	1	4	1
Pentoxone	X	X	X	X
Pentyl Pentanoate	4	1	2	1
Peracetic Acid	1	3	2	3
Perchloric Acid - 2N	1	4	2	1
Perchloroethylene	4	2	4	1
Perfluoropropane	X	X	X	X
Perfluorotriethylamine	X	X	X	X
Permanganic Acid	X	X	X	X
Persulfuric Acid (Caro's Acid)	X	X	X	X
Petrolatum	4	1	4	1
Petrolatum Ether	4	1	2	1
Petroleum Oil, Above 250 °F	4	4	4	2
Petroleum Oil, Below 250 °F	4	1	2	1
Petroleum Oil, Crude	4	1	4	1
Phenol	4	4	4	1
Phenol, 70% / 30% H2O	4	4	4	1
Phenol, 85% / 15% H2O	4	4	4	1
Phenolic Sulfonate	1	3	2	3
Phenolsulfonic Acid	1	3	2	3
Phenylacetamide	X	X	X	1
Phenylacetate	1	3	2	3
Phenylacetic Acid	1	3	2	3
Phenylbenzene	4	4	4	1
Phenylene Diamine	X	X	X	X

Phenylethyl Alcohol	X	X	X	1
Phenylethyl Ether	4	4	4	4
Phenylethyl Malonic Ester	X	X	X	1
Phenylglycerine	1	3	2	3
Phenylhydrazine	2	4	X	1
Phenylhydrazine Hydrochloride	1	3	2	3
Phenylmercuric Acetate	1	3	2	3
Phorone	3	4	4	4
Phosgene	X	X	X	X
Phosphine	X	X	X	X
Phosphoric Acid 3 Molar to 158°F	1	1	2	1
Phosphoric Acid Concentrated Room Temp	1	2	3	1
Phosphoric Acid Concentrated to 158°F	1	4	4	1
Phosphoric Acid, 20%	X	X	X	X
Phosphoric Acid, 45%	X	X	X	X
Phosphorus (Molten)	X	X	X	X
Phosphorus Oxychloride	X	X	X	X
Phosphorus Trichloride	1	4	X	1
Phosphorus Trichloride Acid	1	4	X	1
Phthalic Acid	1	3	2	3
Phthalic Anhydride	1	3	2	3
Pickling Solution	3	4	4	2
Picric Acid (aq)	1	1	X	1
Picric Acid Molten	2	2	4	1
Pine Oil	4	1	4	1
Pine Tar	4	1	2	1
Pinene	4	2	4	1
Piperazine	X	X	X	1
Piperidine	4	4	4	1
Piranha (H2SO4:H2O2)(70:30)	X	X	X	X
Plating Solution (Co, Cu, Au, In, Fe, Ph, Ni, Ag, Sn, Z)	1	1	X	1
Plating Solutions Chrome	2	4	2	1
Plating Solutions Others	1	1	4	1
Pneumatic Service	1	1	4	1
Polyethylene Glycol	1	2	X	3
Polyglycerol	1	3	2	3
Polyglycol	1	3	2	3
Polyvinyl Acetate Emulsion	1	X	X	X
Potassium (Molten)	X	X	X	X
Potassium Acetate	1	2	4	4
Potassium Acid Sulfate	1	3	2	3
Potassium Alum	1	3	2	3
Potassium Aluminum Sulfate	1	3	2	3
Potassium Antimonate	1	3	2	3
Potassium Bicarbonate	1	3	2	3
Potassium Bichromate	1	3	2	3
Potassium Bifluoride	1	3	2	3
Potassium Bisulfate	1	3	2	3
Potassium Bisulfite	1	3	2	3



Potassium Bitartrate	1	3	2	3
Potassium Bromide	1	3	2	3
Potassium Carbonate	1	3	2	3
Potassium Chlorate	1	3	2	3
Potassium Chloride	1	1	1	1
Potassium Chromates	1	3	2	3
Potassium Citrate	1	3	2	3
Potassium Cupro Cyanide	1	1	1	1
Potassium Cyanate	1	3	2	3
Potassium Cyanide	1	1	1	1
Potassium Dichromate	1	1	1	1
Potassium Diphosphate	1	3	2	3
Potassium Ferricyanide	1	3	2	3
Potassium Fluoride	1	3	2	3
Potassium Glucocyanate	1	3	2	3
Potassium Hydroxide 50%	1	2	3	4
Potassium Hypochlorite	1	3	2	3
Potassium Iodate	1	3	2	3
Potassium Iodide	1	3	2	3
Potassium Metabisulfate	1	3	2	3
Potassium Metachromate	1	3	2	3
Potassium Metasilicate	X	X	X	X
Potassium Monochromate	1	3	2	3
Potassium Nitrate	1	1	1	1
Potassium Nitrite	1	3	2	3
Potassium Oxalate	1	3	2	3
Potassium Perchlorate	1	3	2	3
Potassium Perfluoro Acetate	X	X	X	X
Potassium Permanganate	1	3	2	3
Potassium Peroxide	X	X	X	X
Potassium Persulfate	1	3	2	3
Potassium Phosphate (Acid)	1	3	2	3
Potassium Phosphate	1	3	2	3
Potassium Phosphate (Di/Tri Basic)	1	3	2	3
Potassium Pyrosulfate	1	3	2	3
Potassium Salts	1	1	1	1
Potassium Silicate	X	X	X	X
Potassium Sodium Tartrate	1	3	2	3
Potassium Stannate	1	3	2	3
Potassium Stearate	1	3	2	3
Potassium Sulfate	1	1	1	1
Potassium Sulfide	1	3	2	3
Potassium Sulfite	1	1	1	1
Potassium Tartrate	1	3	2	3
Potassium Thiocyanate	1	3	2	3
Potassium Thiosulfate	1	3	2	3
Potassium Triphosphate	1	3	2	3
Prestone Antifreeze	1	1	1	1
PRL-High Temp. Hydr. Oil	4	2	2	1
Producer Gas	4	1	2	1

Propane	4	1	4	1
Propionaldehyde	1	3	2	3
Propionic Acid	1	3	2	3
Propionitrile	4	1	X	1
Propyl Acetate	2	4	4	4
Propyl Acetone or n-Propyl Acetone	1	4	4	4
Propyl Alcohol	1	1	1	1
Propyl Nitrate	2	4	4	4
Propyl Propionate	1	3	2	3
Propylamine	1	3	2	3
Propylbenzene	X	X	X	1
Propylene	4	3	4	1
Propylene Chloride	X	X	X	1
Propylene Chlorohydrin	X	X	X	1
Propylene Dichloride	X	X	X	1
Propylene Glycol	1	3	2	3
Propylene Imine	X	X	X	1
Propylene Oxide	2	4	4	4
Pydraul 90e	1	4	X	1
Pydraul, 10E	1	4	1	4
Pydraul, 115E	1	4	4	1
Pydraul, 230C, 312C, 540C, 4000	4	4	4	1
Pydraul, 29ELT 30E, 50E, 65E	1	4	1	1
Pyranol Transformer Oil	4	1	4	1
Pyridine	2	4	X	1
Pyridine Oil	2	4	4	4
Pyridine Sulfate	1	3	2	3
Pyridine Sulfonic Acid	1	3	2	3
Pyrogallol (Pyrogallic Acid)	4	2	X	1
Pyrogard 42, 43, 55	1	4	X	1
Pyrogard 53, Mobil Phosphate Ester	1	4	4	1
Pyrogard D, Mobil Water-in-Oil Emulsion	4	1	3	4
Pyroligneous Acid	2	4	X	4
Pyrolube	2	4	2	1
Pyrosulfuric Acid	1	3	2	3
Pyrosulfuryl Chloride	4	2	X	1
Pyrrrole	4	4	2	4
Pyruvic Acid	1	3	2	3
Quinidine	4	2	X	1
Quinine	4	2	X	1
Quinine Bisulfate	1	3	2	3
Quinine Hydrochloride	1	3	2	3
Quinine Sulfate	1	3	2	3
Quinine Tartrate	1	3	2	3
Quinizarin	4	2	X	1
Quinoline	4	2	X	1
Quinone	4	2	X	1
Radiation (Gamma, 1.0 E+07 Rads)	2	3	2	4
Raffinate	4	2	X	1

Rapeseed Oil	1	2	4	1
Red Line 100 Oil	4	1	4	1
Red Oil (MIL-H-5606)	4	1	4	1
Resorcinol	1	3	2	3
Rhodium	X	X	X	X
Riboflavin	4	2	X	1
Ricinoleic Acid	4	2	X	1
RJ-1 (MIL-F-25558)	4	1	4	1
RJ-4 (MIL-F-82522)	4	2	4	1
Rosin	4	2	X	1
RP-1 (MIL-R-25576)	4	1	4	1
Saccharin Solution	1	3	2	3
Sal Ammoniac	1	1	2	1
Salicylic Acid	1	2	X	1
Santo Safe 300	3	4	1	1
Sea (Salt) Water	1	1	1	1
Sebacic Acid	1	3	2	3
Selenic Acid	1	3	2	3
Selenous Acid	1	3	2	3
Sewage	1	1	1	1
SF 1154 GE Silicone Fluid	1	2	4	1
SF1147 GE Silicone Fluid	3	2	4	1
SF96 GE Silicone Fluid	1	2	4	1
Shell 3XF Mine Fluid (Fire resist hydr.)	4	1	X	1
Shell Alvania Grease #2	4	1	2	1
Shell Carnea 19 and 29	4	1	X	1
Shell Diala	4	1	4	1
Shell Iru 905	4	1	4	1
Shell Lo Hydrax 27 and 29	4	1	4	1
Shell Macome 72	4	1	4	1
Shell Tellus #32 Pet. Base	4	1	4	1
Shell Tellus #68	4	1	4	1
Shell Tellus 27 (Petroleum	4	1	X	1
Shell Tellus 33	4	1	X	1
Shell UMF (5% Aromatic)	4	1	4	1
Shellac	1	3	2	3
Silane	X	X	X	X
Silicate Esters	4	2	4	1
Silicon Fluoride	X	X	X	X
Silicon Tetrachloride	X	X	X	X
Silicon Tetrafluoride	X	X	X	X
Silicone Greases	1	1	3	1
Silicone Oils	1	1	3	1
Silver Bromide	1	3	2	3
Silver Chloride	1	3	2	3
Silver Cyanide	1	3	2	3
Silver Nitrate	1	2	1	1
Silver Sulfate	1	3	2	3
Sinclair Opaline CX-EP Lube	4	1	4	1
Skelly, Solvent B, C, E	4	1	X	1

Skydrol 500 B4	1	4	3	4
Skydrol 7000	1	4	X	2
Skydrol LD-4	1	4	3	4
Soap Solutions	1	1	1	1
Socony Mobile Type A	4	1	4	1
Socony Vacuum AMV AC781 (Grease)	4	1	4	1
Socony Vacuum PD959B	4	1	4	1
Soda Ash	1	1	1	1
Sodium (Molten)	X	X	X	X
Sodium Acetate	1	2	4	4
Sodium Acid Bisulfate	1	3	2	3
Sodium Acid Fluoride	1	3	2	3
Sodium Acid Sulfate	1	3	2	3
Sodium Aluminate	1	3	2	3
Sodium Aluminate Sulfate	1	3	2	3
Sodium Anthraquinone	1	3	2	3
Sodium Antimonate	1	3	2	3
Sodium Arsenate	1	3	2	3
Sodium Arsenite	1	3	2	3
Sodium Benzoate	1	3	2	3
Sodium Bicarbonate (Baking Soda)	1	1	1	1
Sodium Bichromate	1	3	2	3
Sodium Bifluoride	1	3	2	3
Sodium Bisulfate or Bisulfite	1	1	1	1
Sodium Bisulfide	1	3	2	3
Sodium Bitartrate	1	3	2	3
Sodium Borate	1	1	1	1
Sodium Bromate	1	3	2	3
Sodium Bromide	1	3	2	3
Sodium Carbonate (Soda Ash)	1	1	1	1
Sodium Chlorate	1	3	2	3
Sodium Chloride	1	1	1	1
Sodium Chlorite	1	3	2	3
Sodium Chloroacetate	1	3	2	3
Sodium Chromate	1	3	2	3
Sodium Citrate	1	3	2	3
Sodium Cyanamide	1	3	2	3
Sodium Cyanate	1	3	2	3
Sodium Cyanide	1	1	1	X
Sodium Diacetate	1	3	2	3
Sodium Diphenyl Sulfonate	1	3	2	3
Sodium Diphosphate	1	3	2	3
Sodium Disilicate	1	3	2	3
Sodium Ethylate	1	3	2	3
Sodium Ferricyanide	1	3	2	3
Sodium Ferrocyanide	1	3	2	3
Sodium Fluoride	1	3	2	3
Sodium Fluorosilicate	1	3	2	3
Sodium Glutamate	1	3	2	3
Sodium Hydride	X	X	X	X

Sodium Hydrogen Sulfate	1	3	2	3
Sodium Hydrosulfide	1	3	2	3
Sodium Hydrosulfite	1	3	2	3
Sodium Hydroxide, 3 Molar	1	2	1	2
Sodium Hypochlorite	1	2	2	1
Sodium Hypophosphate	1	3	2	3
Sodium Hypophosphite	1	3	2	3
Sodium Hyposulfite	1	3	2	3
Sodium Iodide	1	3	2	3
Sodium Lactate	1	3	2	3
Sodium Metaphosphate	1	1	X	1
Sodium Metasilicate	1	3	2	3
Sodium Methylate	1	3	2	3
Sodium Monophosphate	1	3	2	3
Sodium Nitrate	1	2	4	X
Sodium Oleate	1	3	2	3
Sodium Orthosilicate	1	3	2	3
Sodium Oxalate	1	3	2	3
Sodium Perborate	1	2	2	1
Sodium Percarbonate	1	3	2	3
Sodium Perchlorate	1	3	2	3
Sodium Peroxide	1	2	4	1
Sodium Persulfate	1	3	2	3
Sodium Phenolate	1	3	2	3
Sodium Phenoxide	1	3	2	3
Sodium Phosphate (Dibasic)	1	1	4	1
Sodium Phosphate (Mono)	1	1	4	1
Sodium Phosphate (Tribasic)	1	1	1	1
Sodium Plumbite	1	3	2	3
Sodium Pyrophosphate	1	3	2	3
Sodium Resinate	1	3	2	3
Sodium Salicylate	1	3	2	3
Sodium Salts	1	1	1	1
Sodium Sesquisilicate	X	X	X	X
Sodium Silicate	1	1	X	1
Sodium Silicofluoride	X	X	X	X
Sodium Stannate	1	3	2	3
Sodium Sulfate	1	1	1	1
Sodium Sulfide and Sulfite	1	1	1	1
Sodium Sulfo cyanide	1	3	2	3
Sodium Tartrate	1	3	2	3
Sodium Tetraborate	1	3	2	3
Sodium Tetrakisphosphate	1	3	2	3
Sodium Tetrasulfide	1	3	2	3
Sodium Thioarsenate	1	3	2	3
Sodium Thiocyanate	1	3	2	3
Sodium Thiosulfate	1	2	1	1
Sodium Trichloroacetate	1	3	2	3
Sodium Triphosphate	1	3	2	3
Solvesso 100, 150	X	X	X	X

Sorbitol	1	3	2	3
Sour Crude Oil	4	3	4	1
Sour Natural Gas	4	3	4	1
Sovasol No. 1, 2, and 3	4	1	4	1
Sovasol No. 73 and 74	4	2	4	1
Soybean Oil	3	1	1	1
Spry	2	1	1	1
SR-10 Fuel	4	1	4	1
SR-6 Fuel	4	2	4	1
Standard Oil Mobilube GX90-EP Lube	4	1	4	1
Stannic Ammonium Chloride	1	3	2	3
Stannic Chloride	1	1	2	1
Stannic Chloride, 50%	1	1	2	1
Stannic Tetrachloride	1	3	2	3
Stannous Bisulfate	1	3	2	3
Stannous Bromide	1	3	2	3
Stannous Chloride (15%)	1	1	2	1
Stannous Fluoride	1	3	2	3
Stannous Sulfate	1	3	2	3
Stauffer 7700	4	2	4	1
Steam Below 400 °F	1	4	3	4
Steam, 400° - 500 °F	3	4	4	4
Steam, Above 500 °F	X	X	X	X
Stearic Acid	2	2	2	X
Stoddard Solvent	4	1	4	1
Strontium Acetate	1	3	2	3
Strontium Carbonate	1	3	2	3
Strontium Chloride	1	3	2	3
Strontium Hydroxide	1	3	2	3
Strontium Nitrate	1	3	2	3
Styrene (Monomer)	4	4	4	2
Succinic Acid	1	3	2	3
Sucrose Solutions	1	1	1	1
Sulfamic Acid	1	3	2	3
Sulfanilic Acid	1	3	2	3
Sulfanilic Chloride	4	2	X	1
Sulfanilimide	4	2	X	1
Sulfite Liquors	1	3	2	3
Sulfolane	1	2	X	2
Sulfonated Oils	4	2	X	1
Sulfonic Acid	1	3	2	3
Sulfonyl Chloride	1	3	2	3
Sulfur	1	4	X	1
Sulfur (Molten)	3	4	3	1
Sulfur Chloride	4	4	3	1
Sulfur Dioxide, Dry	1	4	2	4
Sulfur Dioxide, Liquidified under pressure	1	4	2	4
Sulfur Dioxide, Wet	1	4	2	4
Sulfur Hexafluoride	1	2	X	3
Sulfur Liquors	2	2	4	1

Sulfur Monochloride	4	1	2	1
Sulfur Tetrafluoride	X	X	X	X
Sulfur Trioxide Dry	2	4	2	1
Sulfuric Acid (20% Oleum)	1	3	2	3
Sulfuric Acid, 3 Molar to 158°F	1	2	1	1
Sulfuric Acid, Concentrated Room Temp	3	X	X	1
Sulfuric Acid, Concentrated to 158°F	4	4	4	1
Sulfuric Chlorohydrin (Chlorosulfonic Acid)	1	3	2	3
Sulfurous Acid	2	2	4	1
Sunoco #3661	4	1	4	1
Sunoco All purpose grease	4	1	4	1
Sunoco SAE 10	4	1	4	1
Sunsafe (Fire resist. hydr. fluid)	4	1	X	1
Super Shell Gas	4	1	4	1
Surfuryl Chloride	1	3	2	3
Swan Finch EP Lube	4	1	4	1
Swan Finch Hypoid-90	4	1	4	1
Tallow	4	1	2	1
Tannic Acid (10%)	1	1	2	1
Tar, bituminous	4	2	2	1
Tartaric Acid	2	1	1	1
Tellone II	X	X	X	X
Terephthalic Acid	1	3	2	3
Terpineol	3	2	X	1
Terpinyl Acetate	4	2	X	1
Tertiary Amyl Methyl Ether (TAME)	X	X	X	X
Tertiary Butyl Catechol or p-tert- butylcatechol	2	4	X	1
Tertiary Butyl Mercaptan	4	4	X	1
Tetrabromoethane	4	4	4	1
Tetrabromomethane	4	2	X	1
Tetrabutyl Titanate	1	2	4	1
Tetrachloroethylene	4	4	4	1
Tetrachoroethane	4	4	X	1
Tetraethyl Lead	4	2	X	1
Tetraethyl Lead "Blend"	4	2	X	1
Tetraethyl Orthosilicate (TEOS)	X	X	X	X
Tetrahydrofuran	2	4	4	4
Tetralin	4	4	4	1
Tetramethyl Ammonium Hydroxide	1	3	2	3
Tetramethylcyclotetrasiloxane (TMCTS)	X	X	X	X
Tetramethyldihydropyridine	4	2	X	1
Tetramethyldihydropyridine	4	2	X	1
Tetraphosphogluconate	1	3	2	3
Tetraphosphoric Acid	X	X	X	X
Texaco 3450 Gear Oil	4	1	4	1
Texaco Capella A and AA	4	1	4	1
Texaco Meropa 220 (No Lead)	4	1	4	1
Texaco Regal B	4	1	4	1
Texaco Uni-Temp Grease	4	1	2	1

Texamatic "A" 1581 Fluid	4	1	4	1
Texamatic "A" 3401 Fluid	4	1	4	1
Texamatic "A" 3525 Fluid	4	1	4	1
Texamatic "A" 3528 Fluid	4	1	4	1
Texamatic "A" Transmission Oil	4	1	4	1
Texas 1500 Oil	4	1	2	1
Therminol 44	4	4	4	1
Therminol 55	4	2	4	1
Therminol 66	X	X	X	X
Therminol FR	X	X	X	X
Therminol VP-1, 60, 65	4	4	2	1
Thio Acid Chloride	X	X	X	X
Thioamyl Alcohol	4	1	2	1
Thiodiacetic Acid	1	3	2	3
Thioethanol	1	3	2	3
Thioglycolic Acid	1	3	2	3
Thiokol TP-90B	1	4	X	1
Thiokol TP-95	1	4	X	1
Thionyl Chloride	4	2	X	1
Thiophene (Thiofuran)	4	2	X	1
Thiophosphoryl Chloride	1	3	2	3
Thiourea	1	3	2	3
Thorium Nitrate	1	3	2	3
Tidewater Multigear, 140 EP	4	1	4	1
Tidewater Oil-Beedol	4	1	2	1
Tin Ammonium Chloride	1	3	2	3
Tin Chloride	4	1	2	1
Tin Tetrachloride	4	1	2	1
Titanic Acid	1	3	2	3
Titanium Dioxide	1	3	2	3
Titanium Sulfate	1	3	2	3
Titanium Tetrachloride	4	2	4	1
Toluene	4	4	4	1
Toluene Bisodium Sulfite	X	X	X	X
Toluene Diisocyanate (TDI)	2	4	4	4
Toluene Sulfonyl Chloride	4	2	X	1
Toluenesulfonic Acid	1	3	2	3
Toluidine	4	2	X	1
Toluol	1	3	2	3
Toluquinone	4	2	X	1
Tolylaldehyde	1	3	2	3
Transformer Oil	4	1	2	1
Transmission Fluid Type A	4	1	2	1
Triacetin	1	2	X	4
Triaryl Phosphate	1	4	3	1
Tribromomethylbenzene	4	2	X	1
Tributoxyethyl Phosphate	1	4	X	1
Tributyl Citrate	1	3	2	3
Tributyl Mercaptan	4	4	4	1
Tributyl Phosphate	1	4	4	4



Tributylamine	X	X	X	X
Trichloroacetic Acid	2	2	X	3
Trichloroacetyl Chloride	4	2	X	1
Trichlorobenzene	4	2	X	1
Trichloroethane	4	4	4	1
Trichloroethanolamine	1	3	2	3
Trichloroethylene	4	3	4	1
Trichloromethane	4	4	4	1
Trichloronitromethane (Chloropicrin)	1	3	2	3
Trichlorophenylsilane	X	X	X	X
Trichloropropane	4	4	4	1
Trichlorosilane	4	4	4	1
Tricresyl Phosphate	1	4	3	2
Triethanol Amine	2	3	X	4
Triethyl Phosphate	4	2	X	1
Triethylaluminum	X	X	X	X
Triethylborane	X	X	X	X
Triethylene Glycol	1	3	2	3
Triethylenetetramine	1	3	2	3
Trifluoroacetic Acid	1	3	2	3
Trifluoroethane	4	4	4	1
Trifluoromethane	4	4	4	1
Trifluorovinylchloride	4	2	X	1
Triisopropylbenzylchloride	4	2	X	1
Trimethylamine	1	3	2	3
Trimethylamine (TMA)	1	3	2	3
Trimethylbenzene	4	2	X	1
Trimethylborate (TMB)	4	2	X	1
Trimethylpentane	4	1	2	1
Trinitroloene (TNT)	4	4	X	2
Trioctyl Phosphate	1	4	3	2
Triphenylphosphite	1	3	2	3
Tripoly Phosphate	1	4	3	2
Tripotassium Phosphate	1	3	2	3
Trisodium Phosphate	1	3	2	3
Tritium	X	X	X	X
Tung Oil (China Wood Oil)	4	1	4	1
Tungsten Hexafluoride	X	X	X	X
Tungstic Acid	X	X	X	X
Turbine Oil	4	1	4	1
Turbine Oil #15 (MIL-L-7808A)	4	2	4	1
Turbo Oil #35	4	1	4	1
Turpentine	4	1	4	1
Type I Fuel (MIL-S- 3136)(ASTM Ref. Fuel A)	4	1	4	1
Type II Fuel MIL-S-3136	4	2	4	1
Type III Fuel MIL-S- 3136(ASTM Ref. Fuel B)	4	2	4	1
Ucon Hydrolube J-4	1	1	1	1
Ucon Lubricant 50-HB-100	1	1	1	1
Ucon Lubricant 50-HB-260	1	1	1	1

Ucon Lubricant 50-HB-5100	1	1	1	1
Ucon Lubricant 50-HB55	1	1	1	1
Ucon Lubricant 50-HB-660	1	1	1	1
Ucon Lubricant LB-1145	1	1	1	1
Ucon Lubricant LB-135	1	1	1	1
Ucon Lubricant LB-285	1	1	1	1
Ucon Lubricant LB-300X	1	1	1	1
Ucon Lubricant LB-625	1	1	1	1
Ucon Lubricant LB-65	1	1	1	1
Ucon Oil 50-HB-280x	1	2	X	3
Ucon Oil Heat Transfer Fluid 500 (Polyalkylene Glycol)	1	1	1	1
Ucon Oil LB-385	1	1	1	1
Ucon Oil LB-400X	1	1	1	1
Undecylenic Acid	4	2	X	1
Undecylic Acid	4	2	X	1
Univis 40 (Hydr. Fluid)	4	1	4	1
Univolt #35 (Mineral Oil)	4	1	4	1
Unsymmetrical Dimethyl Hydrazine (UDMH)	1	2	4	4
UPDI(Ultrapure Deionized Water)	1	3	2	3
Uranium Hexachloride	X	X	X	1
Uranium Hexafluoride	X	X	X	X
Uranium Sulfate	X	X	X	X
Uric Acid	1	3	2	3
Valeraldehyde	1	3	2	3
Valeric Acid	1	3	2	3
Vanadium Oxide	4	1	2	1
Vanadium Pentoxide	4	1	2	1
Varnish	4	2	4	1
Vegetable Oil	3	1	1	1
Versilube F44, F55	1	1	X	1
Versilube F-50	1	1	3	1
Vinegar	2	2	3	3
Vinyl Acetate	1	2	X	3
Vinyl Benzene	4	2	X	1
Vinyl Benzoate	4	2	X	1
Vinyl Chloride	4	2	X	1
Vinyl Fluoride	4	2	X	1
Vinylidene Chloride	4	2	X	1
Vinylpyridine	4	2	X	1
Vitriol (White)	1	3	2	3
VV-H-910	1	3	2	1
Wagner 21B Brake Fluid	1	3	3	4
Water	1	1	1	2
Wemco C	4	1	4	1
Whiskey and Wines	1	1	1	1
White Liquor	1	1	X	1
White Oil	4	1	4	1
White Pine Oil	4	2	4	1
Wolmar Salt	1	1	1	1
Wood Alcohol	1	1	1	4

Wood Oil	4	1	4	1
Xenon	1	1	1	1
Xylene	4	4	4	1
Xylidenes-Mixed-Aromatic Amines	1	3	4	4
Xylol	4	4	4	1
Zeolites	1	1	X	1
Zinc Acetate	1	2	4	4
Zinc Ammonium Chloride	1	3	2	3
Zinc Chloride	1	1	X	1
Zinc Chromate	1	3	2	3
Zinc Cyanide	1	3	2	3
Zinc Diethyldithiocarbamate	1	3	2	3
Zinc Dihydrogen Phosphate	1	3	2	3
Zinc Fluorosilicate	X	X	X	X
Zinc Hydrosulfite	1	3	2	3
Zinc Naphthenate	X	X	X	X
Zinc Nitrate	1	1	X	1
Zinc Oxide	1	1	X	1
Zinc Phenolsulfonate	1	3	2	3
Zinc Phosphate	1	1	1	1
Zinc Salts	1	1	1	1
Zinc Silicofluoride	X	X	X	X
Zinc Stearate	1	3	2	3
Zinc Sulfate	1	1	1	1
Zinc Sulfide	1	3	2	3
Zirconium Nitrate	1	1	1	1