

Fluid Compatibility Tables

Volume Swelling(%) A<10%, B 10–20%, C 20–40%, D 사용불가, E 자료불충분

아래 자료 참고시 선택된 유체의 온도는 별도로 고려해야 합니다.

CHEMICAL NAME	TechRes	1472	F375	F575	E472	N174	FQ670
A							
Acetaldehyde	B	D	D	D	B	D	D
Acetamide	A	A	C	B	A	A	A
Acetanilide	A	B	E	C	A	B	B
Acetic Acid, Glacial	A	B	C	D	B	B	B
Acetic Anhydride	A	B	B	D	B	D	D
Acetone	A	C	D	D	A	D	D
Acetonitrile	A	A	A	A	A	C	E
Acetophenone	A	D	D	D	A	D	D
Acetylacetone	A	D	D	D	A	D	D
Acetyl Chloride	A	A	A	A	D	D	A
Acetylene	A	A	A	A	A	A	E
Acetylene Tetrabromide	A	A	A	A	A	D	B
Acrylic Acid	A	D	D	D	C	B	E
Acrylonitrile	A	C	B	C	D	D	D
Aero Lubriplate	A	A	A	A	D	A	A
Aerosafe 2300	A	D	C	D	A	D	C
Aerosafe 2300w	A	D	B	D	A	D	C
Aero Shell IAC Grease	A	A	A	A	D	A	A
Aero Shell 7A Grease	A	A	A	A	D	B	A
Aero Shell 17 Grease	A	A	A	A	D	A	A
Aero Shell 750	A	A	A	A	D	B	B
Aerozene 50(50%Hydrazine, 50% UDMH)	B	D	B	D	A	C	D
Air	A	A	A	A	A	A	A
Alkazene	A	B	B	B	D	D	B
Aluminum Acetate	A	C	A	D	A	B	D
Aluminum Bromide	A	A	A	A	A	A	A
Aluminum Chloride	A	A	A	A	A	A	A
Aluminum Fluoride	A	A	A	A	A	A	A
Aluminum Hydroxide	A	B	A	B	B	B	E
Aluminum Nitrate	A	A	A	A	A	B	E
Aluminum phosphate	A	A	A	A	A	A	A
Aluminum Salts	A	A	A	A	A	A	A
Aluminum Sulphate	A	A	A	A	A	A	A
Alums–NH3–Cr–k	A	A	A	A	A	A	A
Ambrex 33 (Mobil)	A	A	A	A	D	A	C
Ambrex 830 (Mobil)	A	A	A	A	C	A	A
Amines–Mixed(E G: Allyl,Ethyl etc)	A	D	B	D	B	D	D
Aminesbenzoic Acid	A	B	A	B	B	D	E
Aminopyridine	A	D	C	D	B	D	E
Ammonia, Gas, Cold	A	D	D	D	B	D	D
Ammonia, Gas, Hot	A	D	B	D	B	D	D
Ammonia, Liquid(Anhydrous)	A	D	C	D	A	B	D
Ammonia + Lithium Metal in Solution	D	D	D	D	B	D	D
Ammonium Carbonate	A	C	A	C	A	D	E
Ammonium Chloride	A	A	A	A	A	A	E
Ammonium Hydroxide(CONC)	A	A	A	B	A	D	A
Ammonium Nitrate	A	A	A	A	A	A	E
Ammonium Persulfate	A	C	A	C	A	D	E
Ammonium Phosphate	A	A	A	A	A	A	A
Ammonium Salts	A	C	A	C	A	A	C
Ammonium Sulfate	A	A	A	D	A	A	E
Ammonium Sulfide	A	A	A	D	A	A	E
Amyl Acetate	A	D	D	D	A	D	D
Amyl Alcohol	A	A	A	A	A	B	A

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Amyl Borate	A	A	A	A	D	A	E
Amyl Chloride	A	A	A	A	D	A	B
Amyl Chloronaphthalene	A	A	B	A	D	D	B
Amyl Naphthalene	A	A	B	A	D	D	A
Anderol (di-ester)	A	A	B	A	D	B	B
Ang-25(Di-ester Base)(TG749)	A	A	B	A	D	B	B
Aniline	A	A	B	B	B	D	C
Aniline Dyes	A	B	E	B	B	D	B
Aniline Hydrochloride	A	B	A	B	C	D	B
Aniline Oils	A	C	B	C	B	D	C
Aniline	A	A	B	B	B	D	C
Animal Oil	A	A	A	A	B	A	A
AN-O-3 Grade M	A	A	A	A	D	A	A
AN-o-366	A	A	A	A	D	A	A
AN-o-6	A	A	A	A	D	A	A
Ansul Ether 161,181	A	C	A	D	C	C	C
AN-VV-o-366b Hydr. Fluid	A	A	A	A	D	A	A
Argon gas	A	A	A	A	A	A	B
Aroclor,1248	A	A	A	A	B	C	B
Aroclor,1254	A	A	A	A	B	D	A
Aroclor,1260	A	A	A	A	B	A	A
Aromatic fuels	A	A	B	A	D	B	B
Arsenic Acid	A	A	A	A	A	A	A
Arsenic Trichloride	A	D	D	D	D	A	E
Askarel Transformer Oil	A	A	A	A	D	B	B
Asphalt	A	A	E	A	D	B	B
ASTM Oil,No.1	A	D	A	A	D	A	A
ASTM Oil,No.2	A	A	B	A	D	A	A
ASTM Oil,No.3	A	A	C	A	D	A	A
ASTM Oil,No.4	A	A	B	B	D	B	B
ASTM Oil,No.5	A	A	A	A	D	A	E
ASTM Reference Fuel A	A	A	C	A	D	A	A
ASTM Reference Fuel B	A	A	D	A	D	A	A
ASTM Reference Fuel C	A	A	D	B	D	B	B
ATL-857	A	A	D	A	D	A	A
Atlantic Dominion F	A	A	A	A	D	A	A
Aurex 903R Mobil	A	D	A	A	D	A	D
Automatic Transmission Fluid	A	D	A	A	D	A	D
Automotive Brake Fluid	A	B	A	D	A	C	D
B							
Barium Chloride	A	A	A	A	A	A	A
Barium Hydroxide	A	A	A	A	A	A	A
Barium Salts	A	A	A	A	A	A	A
Barium Sulfide	A	A	A	A	A	A	A
Bayol D	A	A	A	A	D	A	A
Bayol 35	A	A	A	A	D	A	A
Beet Sugar Liquors	A	A	A	A	A	A	A
Benzaldehyde	B	D	B	D	A	D	D
Benzene (Benzol)	A	A	C	B	D	D	A
Benzenesulfonic Acid	A	A	A	A	D	D	B
Benzoic Acid	A	A	A	A	D	D	B
Benzophenone	A	A	A	A	B	D	A
Benzyl Alcohol	A	A	B	A	B	D	B
Benzyl Benzoate	A	A	C	A	B	D	A
Benzyl Chloride	A	A	B	A	D	D	A
Black Point 77	A	A	A	A	A	C	C
Blast Furnace Gas	A	A	A	A	D	D	B

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Black Liquor	C	B	A	B	A	B	E
Bleach Liquor	A	A	A	A	A	D	B
Borax	A	A	A	A	A	B	B
Bordeaux Mixture	A	A	A	A	A	B	B
Boric Acid	A	A	A	A	A	A	A
Boron Fluids(HEF)	A	A	A	A	D	B	B
Bray GG-130	A	A	B	A	D	B	B
Btayco719-R(VV-H-910)	A	A	B	A	D	B	B
Btayco885(MIL-L-6085A)	A	A	B	A	D	B	B
Brayco 910	A	D	C	D	A	B	D
Bromine	A	A	A	A	D	D	B
Bromine Pentafluoride	B	D	D	D	D	D	D
Bromine Trifluoride	B	D	D	D	D	D	D
Bromine Water	A	A	A	A	B	C	A
Bromobenzene	A	A	D	A	D	D	A
Bromochloro Trifluoroethane	A	A	A	A	D	D	B
Bunker Oil	A	A	B	A	D	A	A
Butadiene(Monomer)	A	A	B	B	D	D	A
Butane	A	A	B	A	D	A	A
N-Butyl Acetate	A	C	D	D	B	D	D
Butyl Acetyl Rincinoate	A	A	A	A	A	B	B
Butyl Acrylate	A	D	D	D	D	D	D
Butyl Alcohol	A	A	A	A	B	A	A
Butyl Amine or N-Butyl Amine	A	D	B	D	D	C	D
N-Butyl Benzoate	A	A	A	A	A	D	A
N-Butyl Butyrate	A	A	E	A	A	D	A
Butyl Carbitol	A	A	B	A	A	D	A
Butyl Cellosolve	A	D	C	D	B	C	D
Butyl Cellosolve Acetate	A	B	B	B	B	D	B
Butylene	A	A	E	A	D	B	B
N-Butyl Ether	A	D	E	D	C	C	C
Butyl Oleate	A	A	A	A	B	D	B
Butyl Stearate	A	A	A	A	D	B	B
Butyraldehyde	B	D	D	D	B	D	D
Butyric Acid	A	B	E	B	B	D	E
C							
Calcine Liquors	C	A	A	A	A	A	A
Calcium Acetate	A	D	A	D	A	B	D
Calcium Bisulfite	A	A	A	A	D	A	C
Calcium Carbonate	A	A	A	A	A	A	A
Calcium Chloride	A	A	A	A	A	A	A
Calcium Cyanide	A	A	A	A	A	A	A
Calcium Hydroxide	A	A	A	A	A	A	A
Calcium Hypochlorite	A	A	A	A	A	B	B
Calcium Nitrate	A	A	A	A	A	A	A
Calcium Phosphate	A	A	A	A	A	A	A
Calcium Salts	A	A	A	A	A	A	A
Calcium Silicate	A	A	A	A	A	A	A
Calcium Sulfide	A	A	A	A	A	A	A
Calcium Sulfite	A	A	A	A	A	A	A
Calcium Thiosulfate	A	A	A	A	A	B	A
Caliche Liquors	A	A	A	A	A	B	A
Cane Sugar Liquors	A	A	A	A	A	A	A
Caprioc Aldehyde	A	D	E	D	B	E	D
Carbamate	A	A	E	A	B	C	A
Carbitol	A	B	E	B	B	B	B
Carbolic Acid, Phenol	A	A	A	A	A	D	A

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Carbon Dioxide,Dry	A	B	A	B	B	A	B
Carbon Dioxide,Wet	A	B	A	B	B	A	B
Carbon Disulfide	A	A	A	A	D	D	A
Carbon Monoxide	A	A	A	A	A	A	B
Carbon Tetrachloride	A	A	D	A	D	B	B
Carbonic Acid	A	A	A	A	A	D	A
Castor Oil	A	A	A	A	B	A	A
Cellosolve	A	D	A	D	B	D	D
Cellosolve Acetate	A	D	C	D	B	D	D
Celluguard	A	A	A	A	A	A	A
Cellulube (Phosphate esters)	A	A	B	A	A	D	C
Cetane(Hexadecane)	A	A	A	A	D	A	C
Chlordane	A	A	A	A	D	B	B
Chloroacetic Acid	A	D	B	D	B	D	D
Chlororexol	A	A	A	A	D	B	B
Chlorinated Salt Brine	A	A	A	A	D	D	E
Chlorinated Solvents,Dry	A	A	D	A	D	D	A
Chlorinated Solvents,Wet	A	A	D	A	D	D	A
Chlorine,Dry	A	A	C	A	D	D	A
Chlorine,Wet	A	A	C	A	B	C	B
Chlorine Dioxide	B	B	C	B	C	D	B
Chlorine Trifluoride	B	D	D	D	D	D	D
Chloroacetone	A	D	D	D	A	D	D
Chlorobenzene	A	A	E	A	D	D	B
Chlorobromo Methane	A	A	C	A	B	D	B
Chlorobutadiene	A	A	C	A	D	D	B
Chloroform	A	A	D	A	D	D	C
O-Chloronaphthalene	A	A	D	A	D	D	B
Chlorosulphonic Acid	A	D	E	D	D	D	D
Chlorotoluene	A	A	E	A	D	D	B
Chlorox	A	A	A	A	B	B	A
Chromo Alum	A	A	C	A	A	A	A
Chrome Plating Solutions	A	A	A	A	B	D	B
Chromic Acid	A	A	A	A	B	D	C
Chromic Oxide	A	A	A	A	B	D	E
Chromium Potassium Sulfate	A	A	B	A	B	B	E
Circo Light Process Oil	A	A	A	A	D	A	A
Citric Acid	A	A	A	A	A	A	A
Coal Tar	A	A	A	A	D	A	A
Cobaltous Chloride	A	A	A	A	A	A	A
Coconut Oil (Butter)	A	A	A	A	C	A	A
Cod Liver Oil	A	A	A	A	A	A	A
Coke Oven Gas	A	A	A	A	D	D	C
Convelex 10	A	A	B	A	C	D	E
Coolanol (Monsanto)	A	A	A	A	D	A	A
Copper Acetate	A	D	D	D	A	B	D
Copper Chloride	A	A	A	A	A	A	A
Copper Cyanide	A	A	B	A	A	A	A
Copper Salts	A	A	A	A	A	A	A
Copper Sulfate	A	A	A	A	A	A	A
Corn Oil	A	A	A	A	C	A	A
Cottonseed Oil	A	A	A	A	C	A	A
Creosote(Coal Tar)	A	A	A	A	D	A	A
Cresols(Methyl Phenol)	A	A	A	A	D	D	B
Cresylic Acid	A	A	A	A	D	D	B
Crude Oil(Asphalt Base)	A	A	A	A	D	B	B
Cumene	A	A	C	A	D	B	B

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Cupric Sulfate	A	A	B	A	B	A	A
Cutting Oil	A	A	A	A	D	A	A
Cyanogen Chloride	A	B	C	B	C	D	E
Cyclohexane	A	A	B	A	D	A	A
Cyclohexanol	A	A	A	A	D	A	A
Cyclohexanone	B	D	C	D	B	D	D
P-Cymene	A	A	E	A	D	D	B
D							
Decane	A	A	A	A	D	A	A
Delco Brake Fluid	A	D	A	C	A	C	D
Denatured Alcohol	A	A	A	A	A	A	A
Detergent, Water Solution	A	A	A	A	A	A	A
Developing Fluids(photo)	A	A	A	A	B	A	A
Dextron	A	A	A	A	D	A	B
Diacetone	A	D	E	D	A	D	D
Diacetone Alcohol	A	D	D	D	A	D	D
Diazinon	A	D	D	B	D	C	B
Dibenzyl Ether	A	D	C	D	B	C	E
Dibenzyl Sebacate	A	B	A	B	B	D	C
Dibromoethy Benzene	A	A	D	A	D	D	B
Dibutylamine	A	D	B	D	D	D	D
Dibutyl Ether	A	B	D	C	C	D	E
Dibutyl Phthalate	A	E	B	C	B	D	E
Dibutyl Sebacate	A	E	B	B	B	D	E
O-Dichlorobenzene	A	A	D	A	D	D	B
P-Dichlorobenzene	A	A	C	A	D	D	B
Dichloro-Butane	A	A	A	A	D	B	B
Dichloro-Isopropyl Ether	A	C	C	C	C	D	C
Dicyclohexylamine	A	D	C	D	D	C	D
Diesel Oil	A	A	A	A	D	A	A
Di-ester Lubricant MIL-L-7808	A	A	A	A	D	B	B
Di-ester Synthetic Lubricants	A	A	A	A	D	B	B
Diethylamine	A	D	D	D	B	B	D
Diethyl Ether	A	D	D	D	D	D	C
Diethylene Glycol	A	B	A	B	A	A	A
Diisobutylene	A	A	E	A	D	B	C
Diisobutyl Ketone	A	E	E	D	A	E	E
Diisobutyl Sebacate	A	B	E	B	C	C	C
Diisopropyl Ketone	A	D	E	D	A	D	D
Dimethyl Formamide(DMF)	A	A	C	D	B	C	D
Dimethyl Phthalate	A	A	B	A	B	D	B
Dinidro toluene	A	D	D	D	D	D	D
Diocetyl Phthalate	A	E	A	C	B	D	E
Diocetyl Sebacate	A	E	A	B	B	D	E
Dioxane	A	D	D	D	B	D	C
Dioxolane	A	D	D	D	B	D	D
Dipentene	A	A	C	A	D	B	C
Diphenyl	A	A	C	A	D	D	B
Diphenyl Oxides	A	A	B	A	D	D	B
Dow Chemical 50-4,ET588	B	D	D	D	A	C	D
Dow Chemical ET378	B	C	C	C	C	D	E
Dow Corning-3,4,11	A	A	A	A	A	A	A
Dow Corning-5,33,44,200,220,510	A	A	A	A	A	A	B
Dow Corning-705,710	A	A	A	A	A	A	B
Dow Corning- 1208,4050,6620	A	A	A	A	A	A	E
Dow Corning- F-60,XF-60	A	A	A	A	A	A	E
Dow Guard	A	A	A	A	A	A	A

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Dowtherm, A	A	A	B	A	D	D	B
Dowtherm, E	A	A	A	A	D	D	B
Dowtherm, 209.50% Solution	A	C	A	C	A	C	C
Drinking Water	A	A	A	A	A	A	A
Dry Cleaning Fluids	B	A	C	A	D	C	B
DTE Light Oil	A	A	A	A	D	A	A
E							
ELCO 28-EP lubricant	A	A	A	A	D	A	A
Epichlorohydrin	B	D	D	D	B	D	D
Epoxy Resins	A	D	B	D	A	C	E
Esam-6 Fluid	A	D	D	D	B	D	D
Esso Fuel 208	A	A	A	A	D	A	A
Esso Golden Gasoline	A	A	C	A	D	B	A
Esso Motor Oil	A	A	A	A	D	A	A
Esso Transmission fluid(typeA)	A	A	A	A	D	A	A
Esso WS2812(MIL-L-7808A)	A	A	A	A	D	A	A
Esso XP90-EP lubricant	A	A	A	A	D	A	A
Esstic 42,43	A	A	A	A	D	A	A
Ethanol (Ethyl Alcohol)	A	C	A	C	A	A	A
Ethanol Amine (MEA)	A	D	E	D	B	D	D
Ether	A	D	D	D	D	D	C
Ethyl Acetate- Organic ester	A	C	D	D	B	D	D
Ethyl Acetoacetate	A	D	E	D	B	D	D
Ethyl Acrylate	A	D	C	D	B	D	D
Ethyl Benzene	A	A	C	A	D	D	A
Ethyl Benzoate	A	A	C	A	D	D	A
Ethyl Bromide	A	A	A	A	D	B	A
Ethyl Cellulose	A	D	E	D	B	B	D
Ethyl Chloride	A	A	B	A	C	A	A
Ethyl Chlorocarbonate	A	A	B	A	D	D	B
Ethyl Cyclopentane	A	A	B	A	D	A	A
Ethyl Ether	A	D	D	D	C	D	C
Ethyl Formate	B	A	A	A	B	D	A
Ethyl Hexanol	A	A	E	A	A	A	A
Ethyl Mercaptan	A	B	E	B	E	D	A
Ethyl Oxalate	A	A	E	A	D	D	B
Ethyl Pentachlorobenzene	A	A	E	A	D	D	B
Ethyl Silicate	A	A	E	A	A	A	A
Ethylene Chloride	A	B	E	B	D	D	B
Ethylene Chlorohydrin	A	A	A	A	B	D	B
Ethylene Diamine	B	C	B	D	A	A	D
Ethylene Dibromide	A	A	E	A	C	D	C
Ethylene Dichloride	A	A	E	A	C	D	C
Ethylene Glycol	A	A	A	A	A	A	A
Ethylene Oxide	A	D	D	D	D	D	D
F							
F-60 Fluid (Dow Corning)	A	A	A	A	A	A	A
F-61 Fluid (Dow Corning)	A	A	A	A	A	A	A
Fatty Acids	A	A	A	A	C	B	E
FC-43 (Heptacosofluorotributylamine)	D	A	C	A	A	A	A
FC75&FC77(Fluorocarbon)	D	B	C	B	A	A	B
Ferric Chloride	A	A	A	A	A	A	A
Ferric Nitrate	A	A	A	A	A	A	A
Ferric Sulfate	A	A	A	A	A	A	A
Fluorobenzene	A	A	E	A	D	D	B
Fluorolube	B	B	B	B	A	A	B
Fluorosilicic Acid	A	B	A	B	B	A	D

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CHEMICAL NAME	TechRes	1472	F375	F575	E472	N174	FQ670
Formaldehyde	B	B	D	A	B	C	D
Formamide	A	C	B	C	A	C	E
Freon, 11 (Freon MF)	B	B	D	B	D	B	B
Freon, 12	B	A	D	A	B	A	D
Freon, 12&ASTM Oil#2(50/50 Mixture)	B	B	D	A	D	A	E
Freon, 13	B	A	E	A	A	A	D
Freon, 13B1	B	B	E	B	A	A	B
Freon, 14	A	A	E	A	A	A	E
Freon, 21	A	D	E	D	D	D	E
Freon, 22	A	D	E	D	B	D	C
Freon, 31	B	D	E	D	A	D	E
Freon, 32	A	D	D	D	A	A	E
Freon, 112	A	A	D	A	D	B	B
Freon, 113	B	B	D	B	D	B	B
Freon, 114	B	A	D	A	A	A	B
Freon, 114B2	B	B	D	B	D	B	E
Freon, 115	B	B	D	B	A	A	E
Freon, 502	B	B	E	B	A	B	E
Freon, BF	B	A	E	A	D	B	E
Freon, C318	B	B	D	B	A	A	E
Freon, 142b	B	B	D	B	D	B	E
Freon, PCA	C	B	D	B	D	A	E
Freon, TF	C	C	D	B	D	A	E
Fuel Oil	A	A	A	A	D	A	A
Fuel Oil Acidic	A	A	A	A	D	A	E
Fumaric Acid	A	A	A	A	B	A	A
Furan(Furfuran)	A	D	D	D	D	D	E
Furfural	A	D	D	D	B	D	E
Furfuraldehyde	B	D	D	D	B	D	E
Furfuryl Alcohol	A	A	B	A	B	D	D
Furyl Carbinol	A	D	B	D	B	D	D
Fyrquel 90,100,150,220,300,550	A	A	A	A	D	A	C
G							
Gallic Acid	A	A	A	A	B	B	A
Gasoline	A	A	B	A	D	A	A
Glauber' s Salt	A	A	A	A	B	D	A
Glucose	A	A	A	A	A	A	A
Glycols	A	A	A	A	A	A	A
Green Sulphate Liquor	B	A	A	A	A	B	B
Gulf Endurance Oils	A	A	A	A	D	A	A
H							
Halowax Oil	B	A	A	A	D	D	A
Heavy Water	A	A	A	B	A	A	A
HEF-2(High Energy Fuel	A	A	A	A	D	B	B
Helium	A	A	A	A	A	A	A
N-Heptane	A	A	C	A	D	A	A
N-Hexaldehyde	A	D	E	D	A	D	D
N-Hexane	A	A	B	A	D	A	A
N-Hexane-1	A	A	C	A	D	B	A
Hexyl Alcohol	A	A	E	A	C	A	B
High Viscosity Lubricant, H2	A	A	A	A	A	A	B
High Viscosity Lubricant, U4	A	A	A	A	A	A	B
Hydraulic Oil, Petroleum Base	A	A	A	A	D	A	A
Hydrazine	B	D	A	D	A	B	D
Hydrobromic Acid	A	A	A	A	A	D	C
Hydrochloric Acid (HOT)	A	A	A	A	C	D	B
Hydrochloric Acid (CONC)	A	A	A	A	B	B	C

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Hydrocyanic Acid	A	A	A	A	A	B	B
Hydrofluoric Acid	A	A	E	A	D	D	D
Hydrofluoric Acid (HOT)	A	C	E	C	D	D	D
Hydrofluosilicic Acid	A	A	A	A	A	B	D
Hydrogen	A	A	E	A	A	A	C
Hydrogen Chloride	A	A	A	A	A	D	E
Hydrogen Peroxide	A	A	A	A	A	B	B
Hydrogen Sulfide, Dry Cold	A	D	A	D	A	A	C
Hydrogen Sulfide, Dry Hot	A	D	A	D	A	D	D
HYDROLUBE	A	A	A	A	A	A	B
Hydroquinone	B	C	C	B	D	C	B
Hydyne	B	D	E	D	A	B	D
Hyjet	A	D	B	D	A	D	D
Hypochlorous Acid	A	A	E	A	B	D	E
I							
Industron FF44,FF48,FF53,FF80	A	A	A	A	D	A	A
Iodine	A	A	A	A	B	B	A
Iodine Pentafluoride	B	D	D	D	D	D	D
Isobutyl Alcohol	A	A	A	A	A	B	B
Isobutyl Chloride	A	A	D	A	D	D	E
Iso-Butyl N-Butyrate	A	A	A	A	A	D	E
Isobutyl Ether	A	D	D	D	D	B	E
Isobutyr aldehyde	B	D	D	D	B	C	E
Isobutyric Acid	A	D	C	D	B	B	E
Isododecane	A	A	A	A	D	A	A
Iso Octane	A	A	E	A	D	A	A
Isophorone (Ketone)	A	D	B	D	A	D	D
Isopropanol	A	A	A	A	A	B	A
Isopropyl Acetate	A	D	D	D	A	D	D
Isopropyl Alcohol (IPA)	A	A	A	A	A	B	B
Isopropyl Chloride	A	A	D	A	D	D	B
Isopropyl Ether	A	D	D	D	D	B	C
J							
JP 4 (MIL-T-5624)	A	A	B	A	D	A	B
JP 5 (MIL-T-5624)	A	A	B	A	D	A	B
JP 6 (MIL-T-25656)	A	A	B	A	D	A	B
JP 8 (MIL-T-83133)	A	A	B	A	D	D	B
K							
Ke; F Liquids	C	B	C	B	A	A	B
Kerosene	A	A	B	A	D	A	A
L							
Lactams-Amino Acids	A	D	C	D	B	D	D
Lactic Acid,Cold	A	A	A	A	A	A	A
Lactic Acid,Hot	A	A	A	A	D	D	B
Lacquers	A	D	D	D	D	D	D
Lard, Animal Fat	A	A	A	A	B	A	A
Lavender Oil	A	A	A	A	D	B	B
Lead Acetate	A	D	D	D	A	B	D
Lead Nitrate	A	A	B	A	A	A	A
Lead Oxide	A	A	A	A	A	E	E
Ligroin(Petroleum Ether,Benzine)	A	A	B	A	D	A	A
Lime Bleach	A	A	A	A	A	A	A
Lindol, Hydraulic Fluid	A	B	A	B	A	D	C
Linoleic Acid (Linolenic Acid)	A	B	A	B	D	B	E
Linseed Oil	A	A	A	A	C	A	A
Liquid Oxygen	B	D	D	D	D	D	D
Liquid Petroleum Gas (LPG)	A	A	B	A	D	A	C

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Liquimoly	A	A	A	A	D	A	A
Lithium Hydroxide	A	C	A	C	A	B	E
Lubricating Oils, Di-ester	A	A	B	A	D	B	B
Lubricating Oils, Petroleum	A	A	A	A	D	A	A
Lye Solution	A	B	A	B	A	B	B
M							
Magnesium Chloride	A	A	A	A	A	A	A
Magnesium Hydroxide	A	B	A	B	A	B	E
Magnesium Sulfate and Sulfite	A	A	A	A	A	A	A
Magnesium Salts	A	A	A	A	A	A	A
Malathion	A	A	E	A	D	B	B
Maleic Acid	A	A	A	A	D	A	A
Maleic Anhydride	A	A	A	A	D	D	E
Malic Acid	A	A	A	A	D	A	A
Mercuric Chloride	A	A	A	A	A	A	E
Mercury	A	A	A	A	A	A	E
Mesityl Oxide(Ketone)	A	D	D	D	B	D	D
Methane	A	A	B	A	D	A	B
Methanol (Methyl Alcohol)	A	A	A	B	A	A	A
Methyl Acetate	A	D	D	D	B	D	D
Methyl Acetoacetate	A	D	D	D	B	D	D
Methyl acrylate	A	D	D	D	B	D	D
Methylacrylic Acid	A	D	D	D	B	D	D
Methyl Benzoate	A	B	B	A	D	D	A
Methyl Bromide	A	A	B	A	D	B	A
Methyl butyl Ketone	A	D	D	D	A	D	D
Methyl carbonate	A	A	B	A	D	D	B
Methyl cellosolve	A	D	A	D	B	C	D
Methyl Collulose	A	D	A	D	B	B	D
Methyl Chloride	A	A	D	B	C	D	B
Methyl Chloroform	A	B	D	B	D	D	B
Methyl Chloroformate	A	A	A	A	D	D	B
Methylcyclopentane	A	B	B	A	D	D	B
Methylene Bromide	A	A	E	A	D	B	A
Methylene Chloride	A	B	E	B	D	D	B
Methyl Ether	A	A	D	A	B	A	A
Methyl ethyl ketone(MEK)	A	B	D	D	A	D	D
Methyl Ethyl Ketone Peroxide	A	D	E	D	D	D	D
Methyl Formate	A	D	D	D	B	D	E
Methyl Isobutyl ketone(MIBK)	A	D	D	D	B	D	D
Methyl Isopropyl ketone	A	D	D	D	B	D	D
Methyl Methacrylate	A	D	D	D	D	D	D
N-Methyl-2-Pyrrolidone (NMP)	A	A	E	B	B	E	B
Methyl Oleate	A	A	A	A	B	D	B
Methyl Tertiary Butyl Ether(MTBE)	A	B	B	D	C	C	E
MIL-L-23699 LUBRICANTS	A	A	A	A	D	B	B
MIL-L-7808 LUBRICANTS	A	A	A	A	D	B	B
MIL-S-3136, Type I Fuel	A	A	E	A	D	A	A
MIL-S-3136, Type II Fuel	A	A	E	A	D	B	B
MIL-S-3136, Type III Fuel	A	A	E	A	D	B	B
Milk	A	A	A	A	A	A	A
Mineral Oils	A	A	A	A	C	A	A
MLO-7277, 7577 Hydr.	A	A	A	A	D	C	C
MLO-8200, 8515 Hydr.	A	A	A	A	D	B	A
Mobil 24 DTE	A	A	A	A	D	A	A
Mobil HF	A	A	B	A	D	A	E
Mobil Delvac 1100,1110,1120,1130	A	A	A	A	D	A	A

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Mobil Nyvac 20 and 30	A	A	A	A	A	A	A
Mobilgas WA200 Type A,Auto.	A	A	A	A	D	A	E
Mobil Oil SAE 20	A	A	A	A	D	A	E
Mobiltherm 600	A	A	A	A	D	A	E
Mobilux	A	A	A	A	D	A	E
Mono Bromobenzene	A	A	C	A	D	D	E
Monochlorobenzene	A	A	D	A	D	D	E
Monomethyl Aniline	A	B	B	B	D	D	E
Monomethyl hydrazine	B	D	B	D	A	B	E
Monovinyl Acetylene	A	A	C	A	A	A	E
Mopar Brake Fluid	A	D	A	D	A	C	D
N							
Naphthalene	A	A	C	A	D	D	A
Naphthenic Acid	A	A	A	A	D	B	A
Natural Gas	A	A	A	A	D	A	C
Neatsfoot Oil	A	A	A	A	B	A	A
Neon	A	A	A	A	A	A	A
Neville Acid	A	A	A	A	B	D	E
Nickel Acetate	A	D	D	D	A	B	D
Nickel Chloride	A	A	A	A	A	A	A
Nickel Salts	A	A	A	A	A	A	E
Nickel Sulfate	A	A	A	A	A	A	A
Niter Cake	A	A	A	A	A	A	E
Nitric Acid'	A	A	B	A	C	D	B
Nitric Acid- CONC	A	A	B	A	D	D	D
Nitric Acid- Red Fuming	A	B	C	C	D	D	D
Nitrobenzene	A	B	A	B	D	D	D
Nitroethane	A	D	E	D	B	D	D
Nitrogen	A	A	E	A	A	A	A
Nitrogen Tetroxide(N2O4)1	B	D	C	D	D	D	D
Nitromethane	A	D	C	D	B	D	D
Nitropropane	A	D	B	D	B	D	D
Nitrous Oxide	A	A	E	A	A	A	E
O							
Octachloro Toluene	A	A	E	A	D	D	B
Octadecane	A	A	A	A	D	A	A
n-Octane	A	A	E	A	D	B	B
Octyl Alcohol	A	A	A	A	A	B	B
Oleic Acid	A	B	A	B	D	C	E
Oleum(Fuming Sulfuric Acid)	A	A	A	A	D	C	B
Olive Oil	A	A	A	A	B	A	A
Oronite 8200, 8515	A	A	A	A	D	B	E
Orthochloro Ethyl Benzene	A	A	D	A	D	D	B
Ortho-Dichlorobenzene	A	A	D	A	D	D	E
Oxalic Acid	A	A	A	A	A	B	A
Oxygen, Gas (Hot)	A	C	D	C	D	D	A
Oxygen, Liquid	B	D	D	D	D	D	E
Ozone	A	A	A	A	A	D	E
P							
Paint Thinner, Duco	A	B	C	B	D	D	B
Palmitic Acid(Hexadecanoic Acid)	A	A	A	A	B	A	A
Para-dichlorobenzene	A	A	D	A	D	D	E
Par-al-Ketone	B	D	D	D	D	D	D
Parker O Lube	A	A	A	A	D	A	A
Peanut Oil	A	A	A	A	C	A	A
n-Pentane	A	A	E	A	D	A	C
Perchloric Acid-2N	A	A	A	A	B	D	A

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Perchloroethylene	A	A	D	B	D	B	B
Petrolatum	A	A	E	A	D	A	A
Petroleum Oil, Crude	A	A	A	A	D	A	A
Phenol	A	A	A	A	D	D	B
Phenylbenzene	A	A	C	A	D	D	B
Phenyl Ethyl Ether	A	D	D	D	D	D	D
Phenylhydrazine	A	A	A	A	D	D	E
Phorone	A	D	D	D	A	D	D
Phosphoric Acid	A	A	A	A	A	D	B
Phosphorous Trichloride	A	A	A	A	A	D	A
Phthalic Anhydride	A	D	C	D	B	C	E
Pickling Solution	A	B	B	B	C	D	D
Picric Acid,H2O Solution Molten	A	A	E	A	B	B	B
Pinene	A	A	A	A	D	B	A
Pine Oil	A	A	E	A	D	A	E
Piperidine	A	D	E	D	D	D	D
Plating Solutions,Chrome	A	A	A	A	B	D	B
Polyethylene Glycol	A	C	A	C	A	B	E
Polyvinyl Acetate Emulsion	A	C	A	C	A	A	E
Potassium Acetate	A	D	E	D	A	B	D
Potassium Chloride	A	A	A	A	A	A	A
Potassium Cupro Cyanide	A	A	A	A	A	A	A
Potassium Cyanide	A	A	A	A	A	A	A
Potassium Dichromate	A	A	A	A	A	A	A
Potassium Hydroxide	A	A	A	D	A	B	C
Potassium Sulfate or Nitrate	A	A	A	A	A	A	A
Prestone Antifreeze	A	A	B	A	A	A	A
PRL_High Temp.Hydr. Oil	A	A	A	A	D	B	A
Producer Gas	A	A	A	A	D	A	B
Propane	A	A	A	A	D	A	B
Propyl Acetate	A	D	D	D	B	D	D
Propyl Acetone	A	D	D	D	A	D	D
Propyl Alcohol	A	A	A	A	A	A	A
Propylene	A	A	A	A	D	D	B
Propylene Glycol	A	A	A	A	A	A	E
Propylene Oxide	A	D	D	D	B	D	D
Propyl Nitrate	A	A	E	A	B	D	D
Pydraul, 10E	B	A	A	A	A	D	E
Pyranol, Transformer Oil	A	A	A	A	D	A	A
Pyridine	A	D	B	D	B	D	D
Pyrogard 42,43,53,55(Phos phate Ester)	A	A	B	A	A	D	D
Pyrogard C&D(Water&Petroleum)	A	A	A	A	D	A	B
Pyroligneous Acid	A	D	D	D	B	D	D
PYROLUBE	A	A	A	A	B	D	B
Pyrrole	A	D	E	D	D	D	D
R							
Radiation	B	D	A	D	A	C	D
Rapeseed Oil	A	A	A	A	A	B	A
Red Oil (MIL-H-5606)	A	A	A	A	D	A	A
Red Line 100 Oil	A	A	A	A	D	A	A
RJ-1 (MIL-F-25558)	A	A	A	A	D	A	A
RP-1 (MIL-R-25576)	A	A	A	A	D	A	A
S							
Sal Ammoniac	A	A	A	A	A	A	A
Salicylic Acid	A	A	A	A	A	B	E
Santo Safe 300	A	A	A	A	C	D	A
Sea(Salt)Water	A	A	A	B	A	A	A

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Sewage	A	B	A	B	A	A	A
Shell IruS 905	A	A	A	A	D	A	A
Shell Lo Hydrax 27 and 29	A	A	A	A	D	A	A
Silicate Esters	A	A	A	A	D	B	A
Silicone Grease	A	A	A	A	A	A	A
Silicone Oils	A	A	A	A	A	A	A
Silver Nitrate	A	A	A	A	A	B	A
Sinclair Opaline CX–EP Lube	A	A	A	A	D	A	B
Skydrol 500 B4	A	D	A	D	A	D	C
Skydrol 7000	A	B	A	B	A	D	C
Soap Solutions	A	A	A	B	A	A	A
Socony Mobile Type A	A	A	A	A	D	A	A
Soda Ash	A	A	A	A	A	A	A
Sodium Acetate	A	D	B	D	A	B	D
Sodium Becarbonate(Baking Soda)	A	A	A	A	A	A	A
Sodium Borate	A	A	A	A	A	A	A
Sodium Bisulfate or Bisulfite	A	A	A	A	A	A	A
Sodium Chloride	A	A	A	A	A	A	A
Sodium Cyanide	A	B	A	B	A	A	A
Sodium Hydroxide,3 Molar	A	B	A	C	A	B	B
Sodium Hypochlorite	A	A	A	A	B	B	B
Sodium Metaphosphate	A	A	A	A	A	A	A
Sodium Nitrate	A	A	A	A	A	B	E
Sodium Perborate	A	A	A	A	A	B	E
Sodium peroxide	A	A	A	A	A	B	E
Sodium Phosphate(Dibasic)	A	A	A	A	A	A	E
Sodium Salts	A	A	A	A	A	A	A
Sodium Silicate	A	A	A	A	A	A	E
Sodium Sulfate	A	A	A	A	B	D	E
Sodium Sulphide and Sulfite	A	A	A	A	A	A	A
Sodium Thiosulfate	A	A	E	A	A	B	A
Sour Crude Oil	A	A	E	A	D	C	D
Sour Natural Gas	A	A	E	A	D	C	D
Sovasol No.1,2, and 3	A	A	D	A	D	A	E
Soybean Oil	A	A	A	A	C	A	A
SR–6 Fuel	A	A	A	A	D	B	A
SR–10 Fuel	A	A	A	A	D	B	E
Stannic Chloride	A	A	A	A	A	A	A
Stannous Chloride(15%)	A	A	A	A	A	A	A
Stauffer 7700	A	A	C	A	D	B	B
Steam, Below 300' F/149°C	A	B	B	B	A	D	D
Steam, Above 300' F/149°C	B	C	C	D	D	D	D
Stearic Acid	A	B	A	B	B	B	E
Stoddard Solvent	A	A	B	A	D	A	A
Styrene(Monomer)	A	A	D	A	D	D	C
Sucrose Solutions	A	A	E	A	A	A	A
Sulfolane	A	B	A	B	A	B	E
Sulfur Molten	A	A	A	A	C	D	A
Sulfur Chloride	A	A	A	A	D	D	A
Sulfur Dioxide, Wet	A	A	B	D	A	D	E
Sulfur Dioxide, Dry	A	A	B	D	A	D	E
Liquidified under pressure	A	B	B	C	A	D	B
Sulfur Hexafluoride	B	C	C	C	A	B	B
Sulfur Trioxide,Dry	A	A	B	A	B	D	B
Sulfuric Acid Fuming	A	A	D	A	D	D	D
Sulfurous Acid	A	A	A	C	B	B	E
Sunoco SAE 10	A	A	A	A	D	A	A

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CHEMICAL NAME	TechRes	1472	F375	F575	E472	N174	FQ670
Sunoco #3661	A	A	A	A	D	A	A
Sunsafe(Fire resist. Hydr. Fluid)	A	A	A	A	D	A	A
Super Shell Gasoline	A	A	C	A	D	A	A
Swan Finch LP Lube	A	A	B	A	D	A	A
T							
Tar, bituminous	A	A	A	A	D	B	E
Tartaric Acid	A	A	A	A	B	A	A
Terpineol	A	A	A	A	C	B	A
Teritary Butyl Mercaptan	A	A	A	A	D	D	E
Tetrabromoethane	A	A	C	A	D	D	E
Tetrabutyl Titanate	A	A	A	A	B	D	E
Tetrachoroethane	A	A	D	A	D	D	B
Tetrachloroethylene	A	A	D	A	D	B	B
Tetraethyl Lead	A	A	C	A	D	B	B
Tetrahydrofuran (THF)	A	C	D	D	C	D	D
TETRALIN(Tetrahydronapthalene)	A	A	D	A	D	D	A
Texaco 3450 Gear Oil	A	A	A	A	D	A	A
Texaco Uni-Temp. Grease	A	A	A	A	D	A	A
Texamatic 'A Transmission Oil	A	A	A	A	D	A	A
Thiokol TP-90B, TP-95	A	A	A	A	D	A	B
Tidewater Oil-Beedol	A	A	A	A	D	A	A
Titanium Tetrachloride	B	A	B	A	D	B	B
Toluene	A	A	D	A	D	D	B
Toluene Diisocyanate (TDI)	A	A	D	C	B	D	D
Transformer Oil	A	A	A	A	D	A	A
Transmission Fluid Type A	A	A	A	A	D	A	A
Triacetin	A	D	D	D	A	B	D
Triaryl Phosphate	A	A	A	A	A	D	B
Tributoxyethyl Phosphate	A	A	A	A	A	D	B
Tributyl Mercaptan	A	A	E	A	D	D	B
Tributyl Phosphate	A	D	B	D	A	D	D
Trichloroacetic Acid (TCA)	A	C	C	C	B	B	D
Trichloroethane	A	A	D	A	D	D	B
Trichloroethylene	A	A	D	A	D	C	B
Tricresyl Phosphate	A	A	A	A	A	D	B
Triethanol Amine	B	D	A	C	B	C	D
Trifluoroethane	A	A	B	A	D	D	B
Trinitrotolune (TNT)	A	B	B	B	D	D	B
Trioctyl Phosphate	A	B	A	B	B	D	B
Tripoly Phosphate	A	A	A	B	A	D	E
Tung Oil	A	A	A	A	D	A	B
Turbine Oil #15(MIL-L-7808A)	A	A	A	A	D	A	E
Turpentine	A	A	A	A	D	A	B
U							
Ucon Hydrolube J-4	A	B	A	C	A	B	B
UCON Oil LB-385	A	B	A	D	A	A	A
UCON Oil LB-400X	A	B	A	D	A	A	A
UCON Oil 50-HB-280X	A	E	A	C	A	B	E
Univis 40 (Hydr. Fluid)	A	A	A	A	D	A	A
Univolt #35 (Mineral Oil)	A	A	A	A	D	A	A
Unsymmetrical Dimethyl Hydrazine(UDMH)	B	D	C	D	A	B	D
V							
Varnish	A	A	B	A	D	B	B
Vegetable Oil	A	A	A	A	C	A	A
Versilube F-44 and F-50	A	A	A	A	A	A	A
Vinegar	A	A	E	B	A	E	E
Vinyl Acetate	A	D	D	D	B	D	E

Volume Swelling(%) A<10%, B 10-20%, C 20-40%, D 사용불가, E 자료불충분

아래 자료 참고시 선택된 유체의 온도는 별도로 고려해야 합니다.

CHEMICAL NAME	TechRes	1472	F375	F575	E472	N174	FQ670
Vinyl Chloride	A	E	A	A	D	D	E
Vinyl Acetate	A	D	D	D	B	D	E
Vinyl Chloride	A	A	E	A	D	D	E
W							
VV-H-910	A	A	A	A	A	C	B
Wagner 21B Brake Fluid	A	D	A	D	A	C	D
Water	A	A	A	A	A	A	A
Wemco C	A	A	A	A	D	A	A
Whiskey and Wines	A	A	A	A	A	A	A
White Pine Oil	A	A	A	A	D	B	A
Wolmar Salt	A	A	A	A	A	A	A
Wagner 21B Brake Fluid	D	A	D	A	C	D	D
Water	A	A	A	A	A	A	A
Wemco C	A	A	A	D	A	A	A
Whiskey and Wines	A	A	A	A	A	A	A
White Pine Oil	A	A	A	D	B	A	A
Wolmar Salt	A	A	A	A	A	A	A
VV-H-910	A	A	E	A	C	B	B
X							
Xenon	A	A	A	A	A	A	A
Xylene	A	A	D	B	D	D	A
Xylidenes-Mixed-Aromatic Amines	A	C	B	D	D	C	D
Xylol	A	A	D	A	D	D	A
Xenon	A	A	A	A	A	A	A
Xylene	A	D	B	D	D	A	A
Xylidenes-Mixed-Aromatic Amines	C	B	D	D	C	D	D
Xylol	A	D	A	D	D	A	A
Z							
Zeolites	A	A	A	A	A	D	A
Zinc Acetate	A	D	C	D	A	B	D
Zinc Chloride	A	A	A	A	B	A	A
Zinc Salts	A	A	A	A	A	A	A
Zinc Sulfate	A	A	A	A	A	A	A
Zeolites	A	A	A	A	D	A	A
Zinc Acetate	D	C	D	A	B	D	D
Zinc Chloride	A	A	A	B	A	A	A
Zinc Salts	A	A	A	A	A	A	A
Zinc Sulfate	A	A	A	A	A	A	A