



CHEMICAL RESISTANCE GUIDE

MAXIMUM RECOMMENDED OPERATING TEMPERATURES

GASKET MATERIALS	BUNA N	250°F	
	ETHYLENE PROPYLENE	350°F	
	VITON	450°F	
	TEFLON	500°F	
FILTER MEDIA	POLYESTER	300°F	
	POLYPROPYLENE	225°F	
	NYLON	325°F	
HOUSING MATERIALS	CARBON STEEL	400°F	Notes: Maximum temperature at standard vessel design pressure. For higher temperatures consult your Cary rep.
	304 STAINLESS STEEL	400°F	
	316 STAINLESS STEEL	400°F	
	PVC	150°F	
	POLYPROPYLENE	150°F	

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	Gasket Materials				Filter Media			Housing Materials				
	Buna N	Ethylene Propylene	Viton X	Teflon® Fluorocarbon	Polyester	Polypropylene	Nylon	Carbon Steel	304 Stainless Steel	316 Stainless Steel	PVC	Polypropylene

Acetaldehyde	X	Y	X	O		Y	O	O	Y	O	O	X	120
Acetamide	O	O	X	O		X	O	O	Y	O	O	O	O
Acetic Acid 5%	O	O	O	O	200	O	200	X	O	O	O	70	O
Acetic Acid 50%	Y	O	O	O	200	O	70	X	Y	O	O	70	O
Acetic Acid 80%	Y	O	O	O	200	O	70	X	Y	O	O	70	O
Acetic Acid 100%	Y	O	X	O	200	150	70	X	Y	O	X	O	
Acetic Anhydride	X	Y	X	O		O	O	O	X	O	O	X	X
Acetone	X	O	X	O		O	80	O	O	O	O	O	70
Acetophenone	X	O	X	O		X	X	O	200	Y	O	O	X
Acetyl Chloride	X	X	O	O		Y	O	X	X	O	O	O	X
Acetylene	O	O	O	O		O	O	O	O	O	O	70	O
Acrylic Acid	O	O	Y	O	70	150	X	O	O	O	O	O	O
Acrylonitrile	X	X	70	X		70	70	70	X	O	O	O	70
Adipic Acid	O	O	O	O		O	O	X	O	O	O	70	O
Air-Compressed	O	O	O	O		O	O	O	O	O	O	70	O
Aluminum Acetate	Y	O	X	X		O	70	O	O	O	O	70	O
Aluminum Ammonium Sulfate	O	O	O	O		O	70	O	O	O	O	O	O
Aluminum Chloride 5%	O	O	O	O	70	200	70	X	O	O	O	70	O
Aluminum Fluoride 5%	O	O	O	O		O	70	O	X	Y	Y	70	70
Aluminum Hydroxide	O	O	X	O		O	70	O	O	O	O	70	70
Aluminum Nitrate	O	O	O	O		O	70	O	X	Y	O	70	70
Aluminum Sulfate	O	O	O	O	70	80	70	O	O	O	O	70	O
Amino Acids	O	O	O	O		O	O	O	O	O	O	O	O
Ammonia Gas (Dry)	70	Y	X	O	150	20	O	O	O	O	O	70	O
Ammonium Bicarbonate	X	O	X	O		O	70	O	Y	O	O	O	O
Ammonium Bromide 10%	O	O	O	O		O	O	O	O	O	O	O	O
Ammonium Carbonate 10%	X	O	Y	O		Y	180	X	Y	O	O	70	O
Ammonium Chloride 10%	O	O	O	O	70	180	X	Y	O	O	O	70	O
Ammonium Fluoride 10%	O	O	O	O		O	70	O	O	O	O	70	70

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Ammonium Hydroxide 30%	○	○	○	○	70	200	200	○	○	○	70	○	
Ammonium Nitrate 5%	○	○	○	○	70	○	✗	○	○	○	70	○	
Ammonium Phosphate	○	○	○	○	○	140	○	✗	○	○	○	70	○
Ammonium Sulfate 5%	○	○	✗	○	70	170	○	○	○	○	70	70	
Ammonium Thiocyanate	○	○	○	○	70	○	70	○	○	○	70	○	
Amyl Acetate	✗	○	✗	○	○	70	70	○	○	○	○	✗	
Amyl Alcohol	○	○	○	○	70	70	70	○	○	○	70	✗	
Aniline	✗	○	160	○	70	180	70	○	○	○	○	○	
Aqua Regia	✗	✗	○	○	○	75	✗	✗	✗	✗	70	○	
Arsenic Acid	○	○	○	○	○	○	✗	✗	○	○	70	✗	
Asphalt	○	✗	○	○	○	70	○	○	○	○	○	○	
Aviation Fuel	○	✗	○	○	70	80	○	○	○	○	○	✗	
Banana Oil	✗	○	✗	✗	70	○	70	○	○	○	○	70	
Barium Carbonate	○	○	○	○	○	70	○	○	○	○	70	○	
Beer	○	○	○	○	○	○	○	✗	○	○	70	○	
Beet Sugar Liquors	○	○	○	○	○	○	✗	○	○	○	70	○	
Benzene	✗	✗	70	○	○	✗	○	○	○	○	○	✗	
Bromine (Dry)	✗	✗	○	○	✗	70	✗	✗	✗	✗	✗	○	
Bromine (Wet)	✗	✗	○	○	✗	✗	✗	✗	✗	✗	80	○	
Butane	○	✗	○	○	250	70	○	○	○	○	70	○	
Butanoic Acid	○	○	○	○	○	○	○	○	○	○	○	○	
Butyl Acetate	✗	○	✗	○	○	200	○	○	○	○	70	○	
Butyl Alcohol	○	○	○	○	100	○	○	○	○	○	70	○	
Butyl Cellosolve	○	○	✗	○	○	70	○	○	○	○	○	○	
Butyl Chloride	○	○	○	○	○	○	○	○	○	○	○	○	
Butylene	○	✗	○	○	○	○	70	○	○	○	○	○	
Butyric Acid	✗	○	○	○	○	○	○	✗	○	○	○	○	
Calcium Chloride	○	○	○	200	○	✗	○	○	○	○	70	○	
Calcium Hydroxide 5%	○	○	○	○	100	200	○	○	○	○	70	○	

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Calcium Hypochlorite	O	O	O	O	O	200	Y	X	X	X	70	O
Cane Sugar Liquors	O	O	O	O	O	O	O	O	O	O	70	O
Carbolic Acid (Phenol)	X	Y	O	O	X	70	X	O	O	O	70	X
Carbon Dioxide (Dry)	O	O	Y	O	O	O	O	O	O	O	O	O
Carbon Disulfide	X	X	O	O	70	X	70	O	O	O	X	X
Carbon Tetrachloride	Y	X	O	O	O	100	O	O	O	O	80	70
Carbonated Water	O	O	O	O	O	O	100	O	O	O	70	O
Carbonic Acid	Y	O	O	O	O	O	100	O	O	O	70	70
Castor Oil	O	Y	O	O	O	O	O	O	O	O	70	O
Caustic Potash	Y	O	O	O	O	O	O	O	O	O	70	O
Caustic Soda	Y	O	Y	O	O	O	O	100	O	O	70	O
Cellosolve	X	Y	X	O	O	70	O	100	O	100	70	O
Chloracetic Acid	X	Y	X	O	Y	70	X	O	O	O	70	X
Chlorine Gas (Dry)	X	Y	O	O	O	X	X	70	O	O	80	X
Chlorine Gas (Wet)	X	Y	O	O	O	X	X	X	X	Y	80	X
Chlorobenzene	X	X	O	O	200	Y	200	O	O	O	X	70
Chloroform (Dry)	X	X	O	O	70	70	O	O	O	O	X	X
Chromic Acid	X	Y	O	O	Y	80	X	O	O	O	80	80
Cider	Y	O	O	O	O	O	O	X	O	O	70	O
Citric Acid	O	O	O	O	O	O	O	X	O	O	70	Y
Cod Liver Oil	O	O	O	O	O	X	O	Y	O	O	70	X
Coffee Extract	O	O	O	O	O	X	O	X	O	O	Y	X
Cola Syrup	O	O	O	O	70	70	70	O	O	O	O	70
Copper Sulfate	O	O	O	O	70	O	X	X	O	O	70	O
Corn Oil	O	X	O	O	O	100	O	O	O	O	70	70
Cottonseed Oil	O	X	O	O	O	100	O	O	O	O	70	70
Creosol	O	X	O	O	X	O	X	O	O	O	O	O
Creosote	O	X	O	O	O	X	O	O	O	O	70	X
Cresylic Acid	X	X	O	O	O	O	Y	X	O	O	70	X

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Cyclohexane	O	X	O	O	200	X	O	O	O	O	X	X
Cyclohexanol	O	O	O	O	O	150	O	O	O	O	O	O
Cyclohexamine	X	Y	X	O	200	X	O	70	O	70	X	X
DDT Solution	O	O	O	O	O	Y	O	O	Y	Y	O	X
Dextrose	O	O	O	O	O	O	O	O	O	O	70	70
Diacetone Alcohol	X	O	X	O	O	70	O	O	O	O	X	X
Dibutyl Phthalate	X	Y	X	O	O	70	O	O	O	O	O	X
Dichloroethane	X	X	O	O	O	X	O	O	O	O	O	O
Dichloroethylene	O	O	O	O	O	70	70	O	O	O	O	X
Diesel Fuel	O	X	O	O	O	120	O	O	O	O	80	120
Diethanolamine	O	Y	X	O	O	O	O	O	O	O	O	Y
Diethylene Glycol	O	O	O	O	O	Y	O	O	O	O	O	X
Dimethyl Formamide	X	O	O	200	200	200	200	O	70	70	O	O
Diphenyl Oxide	X	X	O	O	O	70	O	O	O	O	O	70
Dowtherm	X	X	O	O	O	70	O	O	O	O	O	70
Epichlorohydrin	X	Y	X	O	O	120	O	O	O	O	O	120
Ethanol	O	O	X	O	O	O	O	O	O	O	O	O
Ethanolamine	Y	Y	X	O	O	70	O	O	O	O	O	70
Ether	X	X	X	O	95	Y	O	O	O	O	X	Y
Ethyl Acetate	X	Y	X	O	O	120	O	O	O	O	X	120
Ethyl Cellulose	Y	Y	X	O	O	70	O	O	O	O	O	70
Ethyl Chloride (Dry)	O	O	O	O	O	X	O	200	O	O	X	X
Ethylene Diamine	O	O	X	O	O	70	70	70	O	70	O	70
Ethylene Glycol	O	O	O	O	O	O	70	O	O	O	70	O
Ethylene Oxide	X	X	X	O	O	X	O	O	O	O	X	X
Fatty Acids	O	Y	O	O	O	O	X	X	Y	O	70	O
Ferric Chloride 1%	O	O	O	O	200	O	X	X	X	X	70	O
Ferric Chloride	O	O	O	O	200	O	X	X	X	X	70	70
Ferric Nitrate	O	O	O	O	70	O	O	O	O	O	70	O

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Ferric Sulfate 5%	○	○	○	○	70	○	70	✗	○	○	70	○
Ferrous Chloride	○	○	○	○	70	○	70	✗	○	70	○	○
Fish Oils	○	○	○	○	○	70	○	○	○	○	70	✗
Fluosilicic Acid	○	○	○	○	○	70	○	○	✗	○	70	○
Formaldehyde 10%	80	○	✗	○	○	○	○	✗	○	○	70	○
Formalin 40%	✗	○	✗	○	○	○	○	✗	○	○	70	70
Formic Acid (Dilute)	○	○	✗	○	○	○	✗	✗	○	○	70	○
Formic Acid (Conc.)	○	○	✗	○	70	○	✗	✗	○	○	○	○
Freon 12	○	○	○	○	○	✗	100	○	○	○	✗	✗
Freon 22	✗	○	✗	○	○	✗	100	○	○	○	✗	✗
Fruit Juices	○	○	○	○	○	70	○	✗	○	○	70	70
Fuel Oils	○	✗	○	○	○	70	○	○	○	○	70	70
Furfural	✗	○	✗	○	○	70	○	○	○	○	✗	✗
Gas-Natural	○	✗	○	○	○	70	○	○	○	○	70	70
Gasoline-Sour	○	✗	○	○	○	✗	70	○	○	○	80	✗
Gasoline-Motor	○	✗	○	○	○	✗	○	○	○	○	80	✗
Gasoline-Aviation	○	✗	○	○	○	✗	○	○	○	○	80	✗
Gelatin	○	○	○	○	○	○	✗	○	○	○	70	70
Glucose	○	○	○	○	○	○	○	○	○	○	70	70
Glycerine-Glycerol	○	○	○	○	○	○	○	○	○	○	70	70
Glycol	○	○	○	○	✗	○	○	○	○	○	70	○
Glycol Monoether	○	○	○	○	○	70	○	○	○	○	70	70
Grease	○	✗	○	○	○	○	○	○	○	○	70	○
Green Sulfate Liquor	○	○	○	○	○	70	✗	○	✗	○	○	○
Gum Arabic	○	○	○	○	○	○	○	○	○	○	○	○
Helium	○	○	○	○	○	○	○	○	○	○	○	70
Hexane	○	✗	○	○	○	70	○	○	○	○	80	70
Honey	○	○	○	○	○	○	○	○	○	○	○	○
Hydraulic Oil-Petroleum Base	○	✗	○	○	○	70	○	○	○	○	70	70

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Hydraulic Oil-Phosphate Ester	X	O	Y	O		O	70	O		O	O	O	O	70
Hydrazine	Y	O	O	O		O	0	O		O	O	O	O	0
Hydrobromic Acid 10%	X	O	O	O		70	150	X		O	X	X	70	O
Hydrobromic Acid 50%	X	O	O	O		O	150	X		O	X	X	70	O
Hydrochloric Acid 5%	160	O	O	O		Y	O	X		X	X	X	O	O
Hydrochloric Acid 30%	70	70	70	O		Y	O	X		X	X	X	O	70
Hydrocyanic Acid 5%	Y	O	O	O		O	70	O		O	O	O	70	70
Hydrocyanic Acid	80	70	O	O		X	O	X		X	X	X	80	O
Hydrofluoric Acid 50%	O	O	O	O		O	70	X		X	X	X	O	70
Hydrogen Gas	O	O	O	O		O	Y	O		O	O	O	70	Y
Hydrogen Peroxide 5%	Y	O	O	O		Y	150	Y		X	O	O	70	140
Hydrogen Peroxide 30%	X	Y	O	O		Y	70	O		X	O	O	70	70
Hydrogen Sulfide (Dry)	70	O	X	O		Y	70	O		Y	O	O	80	70
Hydrogen Sulfide (Wet)	X	O	X	O		O	O	O		X	O	O	70	O
Hydroquinone	X	X	Y	O		70	70	O		O	O	O	70	70
Insulating Oil	O	X	O	O		O	O	O		O	O	O	O	O
Iodine	Y	O	O	O		Y	O	X		X	O	O	X	70
Isopropyl Acete	X	Y	X	O		O	O	O		O	O	O	O	O
Isopropyl Alcohol	Y	O	O	O		70	O	O		O	O	O	70	O
Kerosene	O	X	O	O		O	70	O		O	O	O	70	70
Ketchup	O	O	O	O		O	70	O		O	Y	Y	O	70
Lactic Acid	70	70	O	O		70	O	70		O	X	X	70	O
Lard Oil	O	Y	O	O		O	80	O		X	O	O	70	80
Latex (Natural)	O	O	O	O		O	70	O		O	O	O	O	70
Lead Acetate	Y	O	X	O		O	O	O		X	O	O	70	70
Lime-Sulfur	X	O	O	O		O	70	O		O	O	O	O	70
Linoleic Acid	Y	X	Y	O		O	O	X		X	Y	O	70	O
Linseed Oil	X	O	O	O		O	O	O		Y	O	O	70	100
Lithium Bromide	O	O	O	O		O	70	O		O	O	O	O	70

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Lithium Carbonate	○	○	○	○	○	70	○	○	○	○	○	70
Lithium Chloride	○	X	○	○	○	○	○	○	○	○	○	70
Lithium Hydroxide	○	○	○	○	○	○	X	○	○	○	○	○
Lube Oil	○	○	○	○	○	70	○	○	○	○	70	70
Lye	○	○	○	○	X	○	○	130	○	○	70	○
Magnesium Chloride	○	○	○	○	70	180	70	X	○	○	70	○
Magnesium Hydroxide	○	○	○	○	○	○	○	○	○	○	70	○
Magnesium Sulfate	○	○	○	○	○	180	○	○	○	○	70	70
Mayonnaise	○	○	○	○	○	70	○	X	○	○	○	70
Melamine Resins	○	○	○	○	○	70	○	○	X	X	○	70
Mercuric Chloride 10%	○	○	○	○	70	70	○	X	X	○	70	70
Mercurous Nitrate	○	○	○	○	○	70	○	○	○	○	70	70
Mercury	○	○	○	○	70	70	70	○	○	○	70	70
Methane	○	X	○	○	○	70	○	○	○	○	70	70
Methylene Chloride	X	X	○	○	100	X	100	100	150	212	X	X
Methyl Alcohol	○	70	X	○	○	○	○	○	○	○	70	○
Methyl Acetate	X	○	X	○	○	70	○	○	○	○	○	70
Methyl Cellosolve	X	○	X	○	○	70	○	○	○	○	○	70
Methyl Ethyl Ketone	X	X	○	○	70	○	X	○	X	○	○	70
Milk	X	○	X	○	○	○	○	○	○	○	X	X
Mineral Oil	○	○	○	○	○	70	○	○	○	○	70	70
Molasses	○	X	○	○	200	70	200	○	○	○	70	70
Monoethanolamine	X	○	X	○	○	70	○	○	○	○	○	70
Mustard	○	○	○	○	○	70	○	X	○	○	○	70
Naptha	○	X	○	○	200	70	200	○	○	○	70	70
Naphthalene	X	X	○	○	70	70	70	○	○	○	X	X
Nickel Chloride	○	○	○	○	70	200	X	X	X	X	70	100
Nickel Sulfate	○	○	○	○	○	○	X	X	○	○	70	○
Nitric Acid 10%	X	○	70	○	○	210	X	X	○	○	70	100

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	Buna N	Ethylene Propylene	Viton X	Teflon® Fluorocarbon	Polyester	Polypropylene	Nylon	Carbon Steel	304 Stainless Steel	316 Stainless Steel	PVC	
Nitric Acid 20%	X	X	70	O		Y	180	X		X	Y	212
Nitric Acid 50%	X	X	70	O		Y	70	X		X	212	212
Nitric Acid Fuming	X	X	Y	O		X	X	X		X	125	125
Nitrobenzene 10%	X	X	Y	O		200	Y	200		O	O	X
Nitrobenzene	X	X	Y	O		200	Y	200		O	O	X
Nitrogen	O	O	O	O		O	O	O		O	O	O
Nitrous Oxide	Y	O	O	O		O	O	O		Y	Y	70
Oil, Crude	Y	X	O	O		O	70	O		O	O	70
Oleic Acid 5%	X	X	Y	O		O	180	X		X	X	70
Oleic Acid	X	X	Y	O		150	120	X		X	X	O
Oleum	X	X	O	O		O	X	X		X	O	X
Olive Oil	O	Y	O	O		O	70	O		Y	O	70
Oxalic Acid 5%	Y	O	O	O		Y	180	70		O	O	70
Palm Oil	O	O	O	O		O	70	O		X	O	O
Pentane	O	X	O	O		O	70	O		O	O	80
Perchloroethylene (Dry)	Y	X	O	O		200	Y	200		O	O	70
Petroleum Ether	Y	X	O	O		O	70	O		O	O	70
Petroleum Oil-Refined	O	X	O	O		O	70	O		O	O	70
Petroleum Oil-Sour	Y	X	X	O		O	70	O		X	O	70
Phenol	X	Y	O	O		O	190	X		Y	O	70
Phenol-Formaldehyde Resin	O	Y	O	O		O	O	O		O	O	O
Phosphoric Acid 1%	O	O	O	O		210	210	O		X	212	O
Phosphoric Acid 10%	O	O	O	O		210	210	70		X	212	O
Phosphoric Acid 50%	70	O	O	O		Y	180	X		X	212	O
Phosphoric Acid 80%	70	O	O	O		Y	180	X		X	X	Y
Picric Acid (H ₂ O Sol'n.)	O	O	O	O		O	120	O		X	O	X
Pine Oil	O	X	O	O		70	70	70		Y	O	O
Plating Solutions												
-Arsenic	O	O	O	O		O	150	O		O	O	150

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	Gasket Materials				Filter Media			Housing Materials				
	Buna N	Ethylene Propylene	Viton X	Teflon® Fluorocarbon	Polyester	Polypropylene	Nylon	Carbon Steel	304 Stainless Steel	316 Stainless Steel	PVC	Polypropylene

-Brass Cyanide	○	○	○	○	○	○	○	○	○	○	70	○
-Bronze Cyanide	○	○	○	○	○	70	○	○	○	○	70	70
-Cadmium Cyanide	○	○	○	○	○	○	○	○	○	○	70	○
-Cadmium Fluoborate	○	○	○	○	○	70	○	○	X	○	70	70
-Copper Cyanide	○	○	○	○	○	○	○	○	○	○	70	○
-Gold Cyanide	○	○	○	○	○	○	○	○	○	○	X	○
-Iron Chloride	X	○	○	○	○	○	○	○	X	○	X	○
-Iron Sulfate	○	○	○	○	○	140	140	○	○	○	○	140
-Lead Alkali	○	○	○	○	○	○	○	○	○	○	70	○
-Lead Fluoborate	○	○	○	○	○	○	100	○	○	○	70	○
-Nickel Bright Chloride	○	○	○	○	○	70	○	○	○	○	70	70
-Nickel Dull Chloride	○	○	○	○	○	○	○	○	○	○	70	○
-Nickel Dull Fluoborate	○	○	○	○	○	X	170	○	○	○	X	X
-Silver	○	○	○	○	○	80	○	○	○	○	70	80
-Tin Acid	○	○	○	○	○	70	70	○	○	○	80	70
-Tin Fluoborate	○	○	○	○	○	100	100	○	○	○	80	100
-Zinc Cyanide	○	○	○	○	○	100	○	○	○	○	70	100
-Zinc Fluoborate	○	○	○	○	○	○	130	○	○	○	70	○
Potassium Acetate 10%	○	○	X	○	○	70	○	X	○	○	○	70
Potassium Bisulfate 10%	○	○	○	○	○	70	○	○	X	○	○	70
Potassium Carbonate 10%	○	○	○	○	○	180	○	○	○	○	○	○
Potassium Chloride 5%	○	○	○	○	○	70	180	○	X	○	○	70
Potassium Chromate 10%	○	○	○	○	○	70	○	○	○	○	70	70
Potassium Cyanide 5%	○	○	○	○	○	○	○	○	○	○	70	○
Potassium Ferrocyanide 10%	○	○	○	○	○	70	○	○	○	○	70	70
Potassium Permanganate 5%	○	○	○	○	○	150	X	○	○	○	70	70
Potassium Sulfate 5%	○	○	○	○	○	120	180	120	○	○	70	○
Propane	○	X	○	○	○	250	100	250	○	○	80	100
Propionic Acid	○	○	○	○	○	70	○	X	X	○	○	70

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	Buna N	Ethylene Propylene	Viton X	Teflon® Fluorocarbon	Polyester	Polypropylene	Nylon	Carbon Steel	304 Stainless Steel	316 Stainless Steel	PVC	Polypropylene

Propylene Glycol	O	O	O	O	X	70	O	O	O	O	O	70
Propylene Oxide	X	Yellow	X	O	O	70	O	O	O	O	O	70
Pyridine	X	Yellow	X	O	O	O	Yellow	O	O	O	O	X
Sea Water	O	O	Yellow	O	210	O	240	X	X	X	X	O
Shellac	O	O	O	O	O	70	O	O	O	O	O	70
Silver Nitrate	Yellow	O	O	O	O	O	O	X	O	O	70	O
Soda Ash	O	O	O	O	70	70	O	O	O	O	70	70
Sodium Acetate	Yellow	O	X	O	O	O	O	X	O	O	70	O
Sodium Bicarbonate	O	O	O	O	O	O	O	O	O	O	70	O
Sodium Bisulfate	O	O	O	O	70	150	X	X	X	O	70	70
Sodium Bisulfite	O	O	O	O	O	180	Yellow	X	O	100	O	70
Sodium Borate	O	O	O	O	O	70	O	X	O	O	70	70
Sodium Carbonate	O	O	O	O	Yellow	O	O	O	O	O	70	70
Sodium Chlorate	O	O	O	O	O	180	O	O	O	O	70	120
Sodium Chloride 10%	O	O	O	O	O	O	O	O	O	O	70	O
Sodium Cyanide	O	O	X	O	O	O	Yellow	O	O	70	O	70
Sodium Fluoride 5%	O	O	O	O	O	70	O	X	Yellow	O	70	X
Sodium Hydroxide 5%	Yellow	O	Yellow	O	70	O	O	Yellow	O	O	70	70
Sodium Hydroxide 20%	Yellow	O	Yellow	O	X	O	O	O	O	O	70	O
Sodium Hydroxide 40%	Yellow	Yellow	Yellow	O	X	O	O	O	O	O	70	70
Sodium Hypochlorite 5%	Yellow	O	O	O	Yellow	120	Yellow	X	Yellow	O	70	70
Sodium Metaphosphate	O	O	O	O	O	70	O	Yellow	X	O	70	70
Sodium Nitrate 5%	Yellow	O	O	O	70	180	70	O	O	O	70	70
Sodium Perborate 1%	Yellow	O	O	O	160	180	O	Yellow	O	O	70	O
Sodium Peroxide	Yellow	O	O	O	X	70	O	X	O	O	70	70
Sodium Phosphate	O	O	O	O	70	180	O	X	O	O	120	O
Sodium Polysulfide	O	O	O	O	O	O	O	O	O	O	O	O
Sodium Silicate	O	O	O	O	O	180	O	O	O	O	70	O
Sodium Sulfate	O	O	O	O	70	180	70	Yellow	O	O	70	O

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Sodium Sulfide	O	O	O	O	O	180	O	O	○	X	X	X
Sodium Thiosulfate	O	O	O	O	70	70	70	O	O	O	70	70
Soybean Oil	○	O	O	O	70	180	O	○	O	O	70	○
Stannic Chloride 5%	O	X	O	O	O	100	O	O	O	O	70	100
Stannous Chloride 5%	O	O	O	O	70	70	70	X	X	O	70	70
Starch	O	O	O	O	O	O	O	X	O	O	70	70
Steam	O	O	O	O	O	220	240	○	O	O	X	○
Steacates	O	O	O	O	O	O	O	O	O	O	70	○
Stearic Acid	○	○	O	O	O	O	X	X	O	O	70	○
Stoddard Solvent	O	X	O	O	70	70	70	○	○	○	X	70
Sucrose Solutions	O	O	O	O	O	O	O	X	O	O	70	70
Sulfate Liquors	○	○	O	O	O	70	X	O	X	○	70	X
Sulfur Dioxide (Dry)	X	O	X	O	O	O	X	○	O	O	70	○
Sulfur Trioxide (Dry)	X	○	O	O	O	O	X	○	O	O	70	○
Sulfuric Acid 5%	○	O	O	O	150	O	X	X	O	O	70	○
Sulfuric Acid 50%	X	X	O	O	70	180	X	X	X	O	70	70
Sulfuric Acid 96%	X	X	O	O	X	70	X	O	O	O	X	70
Sulfuric Acid Fuming	X	X	O	O	X	X	X	X	O	O	X	X
Sulfurous Acid	○	○	O	O	O	O	X	X	X	X	70	○
Tannic Acid 10%	O	O	O	O	70	O	70	X	O	O	70	○
Tartaric Acid	O	○	O	O	O	150	O	○	○	O	70	70
Tetrachlorethylene (Dry)	X	X	O	O	O	X	212	O	O	O	X	X
Tetrachloroethane	X	X	O	O	70	70	70	75	O	O	70	70
Tetrahydrofuran	X	○	X	O	O	70	100	X	O	O	X	70
Toluene	X	X	O	O	70	120	O	O	O	O	X	120
Transformer Oil	O	X	O	O	O	120	O	O	O	O	70	120
Trichloroethylene (Dry)	X	X	O	O	70	X	70	O	O	O	X	X
Triethanolamine	○	○	X	O	70	70	O	○	O	O	X	70
Trisodium Phosphate	O	O	O	O	70	120	70	O	O	O	70	120

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Tung Oil	○	✗	○	○	○	70	○	○	○	○	○	70
Turpentine	○	✗	○	○	70	70	○	○	○	○	○	80 70
Urea-Formaldehyde Resin	○	○	○	○	○	○	○	○	○	○	○	○
Vanilla Extract	○	○	○	○	○	○	○	○	○	○	○	70
Varnish	○	✗	○	○	○	✗	○	○	○	○	○	✗
Vegetables Oils	○	✗	○	○	○	100	✗	○	○	○	○	100
Vinegar	○	○	○	○	○	150	✗	✗	○	○	○	70 ○
Water-Fresh	○	○	○	○	210	○	240	✗	○	○	○	70 ○
Water-Salt	○	○	○	○	210	○	240	✗	✗	○	○	70 ○
Waxes	○	○	○	○	○	70	○	○	○	○	○	✗
Whiskey	○	○	○	○	○	70	✗	✗	○	○	○	70 70
Wine	○	○	○	○	○	70	✗	✗	○	○	○	70 70
Xylene	✗	✗	○	○	○	✗	○	○	○	○	✗	✗
Zinc Bromide	○	○	○	○	○	○	✗	○	○	○	○	○
Zinc Cyanide	○	○	○	○	○	○	○	✗	○	○	○	○
Zinc Sulfate	○	○	○	○	○	○	○	✗	○	○	○	70 ○



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CONVERSION INFORMATION

Conversion Information U.S. Mesh to Micron Particle Size

COMPARATIVE PARTICLE SIZE

U. S. MESH	INCHES	MICRONS	U.S. MESH	INCHES	MICRONS
3	.265	6730	40	.0165	420
3-1/2	.223	5660	45	.0138	354
4	.187	4760	50	.0117	297
5	.157	4000	60	.0098	250
6	.132	3360	70	.0083	210
7	.111	2830	80	.0070	177
8	.0937	2380	100	.0059	149
10	.0787	2000	120	.0049	125
12	.0661	1680	140	.0041	105
14	.0555	1410	170	.0035	88
16	.0469	1190	200	.0029	74
18	.0394	1000	230	.0024	63
20	.0331	841	270	.0021	53
25	.0280	707	325	.0017	44
30	.0232	595	400	.0015	37
35	.0197	500			

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VISCOSITY CONVERSION CHART

Viscosity Measurement Method	CPS										TEMPERATURE = 77° F		
	10	20	50	100	200	500	1000	2000	5000	10,000	20,000	50,000	
ASTM, 07				72	143	357	715	1430	3750	7150	14,300	35,700	
ASTM, 10					42	104	208	417	1041	2080	4170	10,410	
ASTM, 15						24	48	95	238	476	953	2,380	
ASTM, 20						8	16	33	82	164	328	820	
ASTM, 25							7	14	36	72	143	357	
Brookfield	10	20	50	100	200	500	1000	2000	5000	10,000	20,000	50,000	
Demmier #1				32	63	156	312						
Demmier #10				3	6	15	31						
Engler (degrees)				14	27	68	137	274	685	1370	2,740	6,850	
Engler (sec.)				690	1300	3460	7000	4,000		70,500			
Ford #3					42	84	208	416	834	2081	4160	8,340	20,810
Ford #4					30	55	135	270	540	1350	2700	5,400	13,500
Fisher #1	200	30											
Fisher #2		15	24	50									
Gardner-Holdt (units)	A-3	A-2	A	D	H	S	W	Y-Z	Z3	Z5	Z6-Z7	Z7-Z8	
Gardner-Holdt (sec.)						5	10	20	50	100	200	500	
Gardner-Verticle (sec.)						5	10	20	50	100	200	500	
Krebs-Stormer (units)	85	105	140			67	85	105	140				
Parlin 7				77	154	385	770	1540	3850	7700	15,400	38,500	
Parlin 10				21	42	104	208	416	1040	2080	4,160	10,400	
Parlin 15					10	25	47	93	232	465	930	2,320	
Parlin 20						8	17	33	83	167	333	833	
Parlin 25								15	36	72	143	357	
Parlin 30									19	38	77	192	
Saybolt Furol		24	48	96	238	476	954	2380	4760	9,540	23,800		
Saybolt Universal (SUS)	96	238	476	954	2380	4760	9540	23,800	47,600	95,400			
Zahn G1	38	60	100	267	667	1332	2670	6670	13,320	26,700		66,700	
Zahn G2	16	24	42	82	161	323	645	1610	3,230	6,450		16,100	
Zahn G3				27	58	113	204	510	1,020	2,040		5,100	
Zahn G4					19	38	71	160	400	800		1,600	4,000
Zahn G5						13	27	50	97	212	424	848	2,120

COMPARATIVE FINENESS DATA

HEGMAN(S) SCALE	PRODUCTION CLUB SCALE	DEPTH OF MILS	WELLS MICRON	CLOSEST U.S. MESH SIZE
0	0.00	4.0	100.00	140
1	1.25	3.50	87.50	170
2	2.50	3.00	75.00	200
3	3.75	2.50	62.50	230
4	5.00	2.00	50.00	325
5	6.25	1.50	37.50	-
6	7.50	1.00	25.00	400
7	8.75	0.50	12.50	-
7-1/2		0.25	6.25	-
8	10.00	0.00	0.00	-

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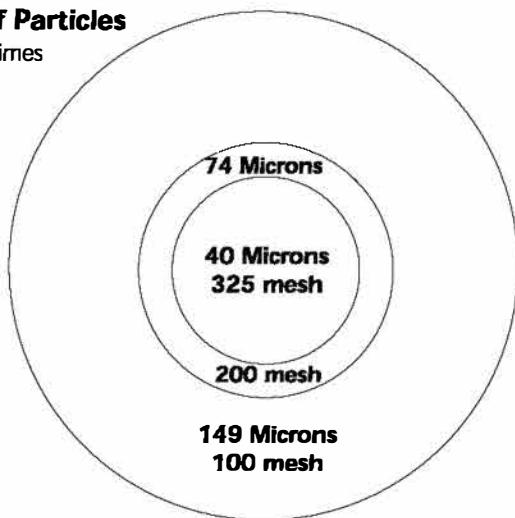
APPROXIMATE VISCOSITY OF COMMON LIQUIDS

LIQUID	VISCOSITY CPS	@ TEMPERATURE °F.	LIQUID	VISCOSITY CPS	@ TEMPERATURE °F.
Asphalt, Virgin	7,250	250	Neatsfoot Oil	230	100
Asphalt Emulsion	2,100	300		130	130
Type 1	4,000	100	Oils—		
	1,025	100	Fuel Oil No. 1	37	70
Asphalt Emulsion,	575	77	Fuel Oil No. 2	33	100
Types II, V & VI	220	100	Fuel Oil No. 5	500	100
Black Liquor	3,100	122		175	130
	1,525	130	Fuel Oil No. 6	1,725	122
Bone Oil	220	130		480	160
	65	212	SAE No. 10	200	100
Carbolic Acid	65	65		105	130
Castor Oil	1,350	100	SAE No. 20	320	100
	525	130		150	130
Caustic Soda Solution			SAE No. 30	490	100
20% NaOH	40	65		220	130
30%NaOH	58	65	SAE No. 50	1,275	100
40%NaOH	110	65		95	210
Cocoanut Oil	144	100	SAE No. 70	2,700	100
	78	130		140	210
Cod Oil	150	100	SAE No. 90 Transmission Lube	1,150	100
	95	130		400	130
Cottonseed Oil	176	100	SAE No. 140 Transmission tube	1,625	130
	100	130		160	210
Glucose	67,500	100	Olive Oil	200	100
	7,500	150		115	130
Glycerine (100%)	2,950	68.6	Peanut Oil	250	100
	813	100		145	130
Glycol:			Petrolatum	100	130
Propylene	240	70		77	160
Triethylene	190	70	Printers' Ink	6,250	100
Diethylene	150	70		2,100	130
Ethylene	90	70	Rosin (Wood)	25,500	190
Insulating Oil	115	70		10,300	200
	65	100	Sulfuric Acid (100%)	75.7	68
Kerosene	35	68	Turbine Lube Oil	420	100
	32.6	100	Turpentine	33	60
Lard	287	100		32.6	100
	160	130	Varnish-Spar	1,425	68
Linseed Oil, Raw	143	100		650	100
	93	130			
Molasses, C (Blackstrap of final)	135,000	100			
	40,000	130			

Relative Size of Particles

Magnification 500 times

- 2 Microns
- 5 Microns
- 8 Microns
- 25 Microns



Micron Comparisons

Substance	Microns
Table salt	100
Human hair (average dia.)	50-70
White blood cell	25
Talcum powder	10
Cocoa	8-10
Red blood cell	8
Bacteria (cocci)	2

Note: Lower limit of visibility (naked eye)—40Microns

The

CARY COMPANY

Est. 1895

CHEMICAL RESISTANCE GUIDE

CONVERSION FACTORS

MULTIPLY	BY	TO OBTAIN
Atmospheres	14.7	psi
Barrels of Oil	42.0	gallons (U.S.)
Centimeters	.03281	feet
Centimeters	.3937	inches
Centipoise	.01	poises
Centistoke	.01	stokes
Cubic centimeters	.06102	cubic inches
Cubic centimeters	.0002642	gallons (liq.)
Cubic feet	7.4805	gallons (liq.)
Cubic feet	.1728	cubic inches
Cubic feet/min.	7.4805	g.p.m.
Cubic inches	.004329	gallons
Cubic inches	16.387	cubic cm.
Cubic inches	.0005787	cubic feet
Cubic meters	264.17	gallons (liq.)
Cubic metes	35.31	cubic feet
Feet	30.48006	centimeters
Feet	.3048006	meters
Feet of water	.4335	psi
Feet of water	.8826	inches of Hg.
Feet/min	.01136	miles per hour
Feet/second	.681818	miles per hour
Gallons	3,785.43	cubic cm.
Gallons	231	cubic inches
Gallons	.83268	gallons (imp.)
Gallons	.13368	cubic feet
Gallons/min.	.13368	cu. ft./min
Inches	.0254	meters
Inches of Hg.	1.133	feet of water
Inches of Hg.	.491	psi
Kilograms	2.2046	pounds (avdp.)
Kilogram/sq. cm.	14.2233	psi
Kilograms/sq. mm	1,422.33	psi
Liters	.264178	gallons
Meters	3.2808	feet
Poise	100.0	centipoise
Pounds water	.11985	gallons
PSI	2.036	inches of Hg.
PSI	2.31	feet of water
Square inches	6.4516	sq. cm.

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