Allied Filter Systems Ltd

CHEMICAL COMPATIBILITY GUIDE

KEY

- ✓ Recommended
- ✗ Not Recommended
- ⊘ No Data Available
- 100 Max Temp Rating (°C)
- \+ Testing Recommended

This chart has been complied using many sources, all believed to be reliable. However, the information and accuracy of these ratings cannot be guaranteed

	Nylon	Polypropylene	Polyester	304 Stainless Steel	316L Stainless Steel	Buna-N	Viton	FEP Encapsulated Viton	EPDM
Acetaldehyde	⊘	✓	21	✓	✓	✗	✗	149	✓
Acetic Acid, 5-20%	✗	✓	✓	✓	⊘	✗	✓	149	✓
Acetic Acid, 50%	✗	✓	✓	✗	⊘	⊘	✓	149	✓
Acetic Acid, 80%	✗	✓	✓	✗	⊘	+	✓	149	✓
Acetone	52	✓	✗	✓	✓	✗	✗	149	✓
Acetyl Chloride	✗	✗	+	✓	✓	✗	✓	149	✗
Acrylic Acid	+	✗	+	✓	✓	✗	+	50	✓
Acrylonitrile	21	21	21	✓	✓	✗	✗	149	✗
Aluminum Chloride, 5%	21	✓	✓	+	✗	✓	✓	149	✓
Aluminum Fluoride	21	✓	+	✗	✗	✓	✓	149	+
Aluminum Hydroxide	21	✓	21	✓	⊘	+	✓	149	+
Ammonium Bicarbonate	+	✓	+	+	✓	✓	+	93	✓
Ammonium Chloride, 10%	✗	✓	27	✗	+	✓	✓	149	+
Ammonium Fluoride, 40%	21	+	+	✗	✗	✓	+	149	+
Ammonium Hydroxide	21	93	✗	✓	21	+	✓	149	✓
Ammonium Sulfate	21	✓	27	✓	✓	✓	+	149	✓
Aniline	+	✗	✗	✓	✓	✗	✗	185	✗
Beer	21	✓	+	✓	✓	✗	✓	149	✓
Beet Sugar Liquors	21	127	+	+	+	✓	✓	149	+
Benzene	21	✗	27	✓	✓	✗	✓	149	✗
Butanoic Acid (Butyric Acid)	+	127	+	✓	+	+	+	149	+
Butanol (Butyl Alcohol)	21	✓	21	✓	✓	✓	✓	149	✓
Butyl Acetate	21	+	21	+	✓	✗	✗	149	+
Butylene	+	✗	+	✓	✓	✗	+	+	✗
Calcium Chloride	21	✓	27	✗	✗	✓	✓	149	✓
Calcium Hydroxide	21	✓	✗	✓	✓	✓	✓	149	✓
Calcium Hypochlorite (20%)	✗	✓	21	✗	✗	✗	+	149	+
Cane Sugar Liquors	21	✓	+	+	+	✓	+	149	+
Carbolic Acid, Phenol	✗	60	✗	✓	✓	+	+	+	+
Carbonated Water	21	60	21	✓	✓	+	✓	21	+
Caustic Soda (50%)	✗	✓	UPTO 10% TO 27	21	✓	✓	21	✓	✓
Chloroacetic acid	✗	✓	✗	✗	✓	✗	✗	149	+
Chlorobenzene	21	✗	✗	+	✓	✗	✓	149	✗
Chloroform	✗	✗	+	⊘	⊘	✗	✓	149	✗
Chromic Acid over 25%	✗	✓	UP TO 50% TO 21	✗	✓	✗	✓	149	✗
Chromic Acid to 25%	✗	✓	21	✗	✓	✗	✓	149	✓
Cider	+	127	+	✓	✓	+	✓	50	+
Citric Acid	UP TO 10% TO 21	✓	27	✓	150	✓	✓	149	✓
Copper Sulfate	+	✓	21	✓	✓	✓	✓	149	✓
Corn Oil	21	✓	21	+	+	✓	+	149	+
Creosote, Coal tar Oil	+	✗	+	+	+	+	+	21	+
Creosote, Wood oil	+	✗	+	+	+	+	+	21	+
Cresols	✗	✗	+	✓	✓	✗	✓	✓	✗
Cresylic Acid	✗	✗	UP TO 50% TO 27	✓	✓	✗	✓	149	+
Cyclohexane	21	✗	✗	✓	✓	✓	✓	149	✗
Cyclohexanol	21	+	21	✓	✓	✗	✓	149	✗
Cyclohexanone	21	✗	21	✓	✓	✗	✗	312	✗
Dichloroethane	+	✗	+	✓	✓	✗	+	+	✗
Dichloroethylene	21	✗	21	✓	✓	✗	✓	149	✗
Diesel Fuel	21	⊘	+	✓	✓	✗	✓	149	✗
Diethylene Glycol	21	✓	UP TO 90% TO 21	✓	✓	✓	✓	52	✓
Dimethyl Formamide (DMF)	21	✓	+	✓	✓	✗	✗	309	✓
Ethanol (Ethyl Alcohol)	21	✓	21	✓	✓	⊘	✓	✓	✓
Ether (Ethyl Ether)	21	✗	21	✓	✓	✗	✗	149	✗
Ethyl Acetate - Organic ester	50	✗	21	✓	✓	✗	✗	149	+
Ethyl Chloride (Chloroethane)	+	✗	✗	✓	✓	✓	✓	149	✓
Ethylene Glycol	21	✓	27	✓	✓	✓	✓	149	✓
Fatty Acids	+	✓	+	✓	✓	✗	✓	149	+
Ferric Chloride	UP TO 5% TO 21	✓	27	✗	✗	✓	✓	149	✓
Ferric Nitrate 5%	+	✓	+	✓	✓	✓	✓	149	✓
Ferric Sulfate 5%	✗	✓	21	+	✓	✓	✓	149	✓
Ferrous Chloride	+	✓	27	✗	✗	✓	✓	149	✓
Fish Oils	+	✓	+	+	+	✓	+	93	+
Formaldehyde	21	✓	UP TO 40% TO 27	UP TO 40%	✓	+	+	149	✓
Formic Acid (Conc.)	✗	52	+	✗	✓	+	✗	149	✓
Formic Acid (3%)	✗	60	21	✓	✓	+	+	149	+
Formic Acid (10%)	✗	60	✗	✓	✓	+	+	149	✓
Fruit Juices	21	✓	21	✓	✓	+	✓	149	+
Fuel Oils	21	21	21	+	+	+	+	149	+
Gelatin	21	✓	27	✓	✓	✓	✓	149	+
Glucose (Corn Syrup)	21	✓	21	✓	✓	✓	✓	149	✓
Glycerine (Glycerol)	52	✓	21	✓	✓	✓	✓	149	+
Glycols	21	✓	21	✓	✓	✓	✓	149	✓
Gum Arabic	+	+	+	+	+	+	+	+	+
Hexane	21	✗	21	✓	✓	✓	✓	149	✗
Honey	+	✓	+	✓	✓	+	✓	+	+
Hydrazine (Diamine)	+	21	+	+	✓	+	⊘	+	✓
Hydrobromic Acid	✗	+	+	+	✗	✗	✓	149	+
Hydrofluoric Acid, 10%	✗	✓	✗	✓	⊘	+	✓	149	+
Hydrofluoric Acid, 50%	✗	✓	✗	✓	⊘	✗	✓	149	✗
Hydrogen Peroxide (5%)	✗	✓	+	✓	✓	✗	⊘	149	+
Hydrogen Peroxide (30%)	✗	✓	+	+	✓	+	⊘	149	+
Hydrogen Sulfide Gas, Wet	+	127	+	✗	✓	✗	✗	149	✓

	Nylon	Polypropylene	Polyester	304 Stainless Steel	316L Stainless Steel	Buna-N	Viton	FEP Encapsulated Viton	EPDM
Isopropyl Acetate	50	100	+	✗	✓	✗	✗	52	+
Kerosene (Similar to RP-1 and JP-1)	50	27	93	+	✓	✓	✓	149	✗
Latex	+	✓	+	+	✓	✓	✓	21	✓
Lead Acetate	27	✓	27	+	✓	+	✗	149	✗
Lubricating Oils, Di-ester	21	60	+	+	+	✗	+	+	+
Lubricating Oils, SAE 10	21	21	27	+	+	✓	+	149	+
Lubricating Oils, SAE 20	21	21	27	+	+	✓	+	149	+
Lubricating Oils, SAE 30	21	21	27	+	+	✓	+	149	+
Lubricating Oils, SAE 40	21	21	27	+	+	✓	+	149	+
Lubricating Oils, SAE 50	21	21	27	+	+	✓	+	149	+
Lubricating Oils, SAE 60	+	+	+	+	+	+	+	+	+
Lubricating Oils, SAE 21	+	+	+	+	+	+	+	+	+
Lye Solutions	+	60	+	+	+	+	+	149	+
Magnesium Chloride	21	✓	21	✗	⊘	✓	✓	149	✓
Magnesium Hydroxide	21	✓	21	✓	✓	✗	✓	149	✓
Magnesium Sulfate	21	✓	27	✓	✓	✓	✓	149	✓
Methyl Acetate	+	21	21	✓	✓	✗	✗	50	✗
Methyl Chloride	21	✗	✗	✓	✓	✗	✓	149	✗
Methyl Ethyl Ketone (MEK/Butanone)	52	✗	✗	✓	✓	✗	✗	149	✓
Methylene Chloride	✗	✗	✗	✓	✓	✗	✓	149	✗
Milk	60	✓	21	✓	✓	✓	✓	149	+
Mineral Oils	121	✓	21	✓	✓	✓	✓	356	✗
Nickel Chloride	✗	✓	✗	✗	⊘	✓	✓	149	✓
Nickel Sulfate	21	✓	27	✓	✓	✓	✓	149	✓
Nitric Acid (Red Fuming)	✗	✗	✗	✓	⊘	✗	+	149	✗
Nitric Acid (10%)	✗	✓	21	✓	✓	✗	✓	149	+
Nitric Acid (20%)	✗	✓	21	✓	✓	✗	✓	149	+
Nitric Acid (50%)	✗	21	+	✓	⊘	✗	✓	149	✗
Nitrobenzene	✗	21	✗	✓	✓	✗	✓	✓	✗
Oleum (Fuming Sulfuric Acid)	✗	✗	✗	✓	✓	✗	✓	✓	✗
Olive Oil	+	✓	+	✓	✓	✓	✓	+	+
Palm Oil	21	21	+	+	+	+	✓	21	+
Perchloroethylene	21	⊘	+	✓	✓	+	✓	149	+
Petroleum Ether	21	✗	21	✓	✓	✓	✓	149	✗
Petroleum Oil, Above 2500F	+	⊘	+	+	+	✓	21	+	+
Petroleum Oil, Below 2500F	+	⊘	+	+	+	✗	+	+	+
Phenol, 21%/30% H2O	+	54	✗	+	+	+	+	+	+
Phenol, 85%/15% H2O	+	54	✗	+	+	+	+	+	+
Phosphoric Acid (Conc.)	✗	✓	+	✓	⊘	✗	✓	149	+
Phosphoric Acid (10%)	✗	✓	21	✓	⊘	✓	✓	149	✓
Phosphoric Acid (50%)	✗	✓	21	✓	⊘	✗	✓	149	+
Phosphoric Acid (80%)	✗	✓	21	✓	⊘	✗	✓	149	+
Potassium Carbonate	21	✓	27	+	✓	✓	✓	149	✓
Potassium Chloride	21	✓	27	✓	⊘	✓	✓	149	✓
Potassium Sulfate (10%)	21	✓	+	✓	✓	✓	✓	149	✓
Propionic Acid	+	✓	+	+	✓	✗	✓	50	✓
Propylene Glycol	+	✓	+	✓	✓	✓	✓	+	✓
Sea Water	21	✓	21	✗	✗	✓	✓	149	✓
Silver Nitrate	21	✓	21	✓	✓	+	✓	149	✓
Sodium Acetate	27	✓	27	✓	✓	✗	✗	149	✓
Sodium Bicarbonate 20% (Baking Soda)	21	✓	+	✓	✓	✓	✓	149	✓
Sodium Bisulfate	+	✓	+	+	✓	+	✓	149	✓
Sodium Bisulfite	21	✓	27	✓	✓	✓	✓	149	✓
Sodium Carbonate (Soda Ash)		✓	21	✓	✓	✓	✓	149	✓
Sodium Chloride (Salt)	21	✓	21	+	⊘	✓	✓	149	✓
Sodium Fluoride	160	✓	+	✗	✗	✓	✓	149	✓
Sodium Hydroxide (5%)	+	✓	160	✓	✓	✓	+	149	✓
Sodium Hydroxide (20%)	+	✓	✗	✓	✓	✓	✓	149	✓
Sodium Hydroxide (40%)	+	✓	✗	✓	✓	+	✓	149	✓
Sodium Hypochlorite (5.25%)	✗	+	+	✗	✗	✗	✓	149	+
Sodium Nitrate	21	✓	27	✓	✓	✓	✓	149	✓
Sodium Sulfate (Glauber's Salt)	+	✓	27	✓	✓	✓	✓	149	✓
Soybean Oil	+	127	21	⊘	+	✓	+	93	+
Starch	21	✓	+	✓	✓	✓	✓	60	+
Steam	✗	250	+	✓	✓	✗	✗	✓	✓
Stearic Acid	21	✓	+	✓	✓	+	✓	+	+
Stoddard Solvent	+	✓	+	✓	✓	✓	✓	+	✗
Sulfuric Acid (Fuming)	✗	✗	✗	⊘	+	✗	+	149	✗
Sulfuric Acid (5%)	✗	✓	+	⊘	✓	✓	✓	✓	✗
Sulfuric Acid (50%)	✗	✓	✗	⊘	✗	✗	✓	✓	✗
Sulfuric Acid (96%)	✗	✗	✗	⊘	✗	✗	✓	✓	✗
Sulfurous Acid	✗	✓	+	✓	✓	✗	✓	149	✗
Tetrachloroethane	+	✗	+	✓	✓	✗	✓	149	✗
Tetrahydrofuran	21	✗	27	✓	✓	✗	✗	149	✗
Toluene (Toluol)	50	+	21	✓	✓	✗	✓	149	✗
Turpentine	21	✗	21	✓	✓	✓	✓	149	✗
Urea-Formaldehyde Resins	+	21	+	+	✓	✓	+	+	+
Varnish	60	✓	+	✓	✓	✗	✓	21	✗
Vegetable Oil	21	✓	21	✓	✓	✓	✓	✓	✓
Vinegar (4-8% Acetic Acid)	✗	✓	21	✓	✓	✗	✓	149	✓
Water	✓	✓	✓	✓	✓	✓	✓	✓	✓
Waxes	+	60	✓	+	+	+	+	+	+
Xylene (Xylol)	21	+	21	✓	✓	✗	✓	149	✗
Zinc Sulfate (White Vitriol)	21	✓	27	✓	✓	✓	✓	149	✓