

Chemical Resistance Chart notes

A – No Effect – Excellent

B – Minor Effect – Good

C – Moderate Effect – Fair

D – Severe Effect – Not Recommended

1 – Satisfactory to 72 deg F (22 deg C)

2 – Satisfactory to 120 deg F (48 deg C)

* - Information not available

Chemical resistance data provided in these charts are based on published reports of laboratory testing and practical experience by the manufacturers of the materials listed therein. This information is to be used as a guide only and not as a guarantee of chemical compatibility with Rusco filters. Final material selection for Rusco filters is the sole responsibility of the purchaser and this determination should be made from field testing in actual working conditions. Variations in chemical behavior during handling due to factors such as temperature, pressure and concentration can cause equipment to fail even though it passed an initial test. **SERIOUS INJURY MAY RESULT.** Use suitable guards and/or personal protection when handling chemicals.

FROM THE CHART

PVC BODY / ELEMENT: Used on all the standard Spin-Down and Sediment Trapper filters.

POLYPROPYLENE HT BODY / ELEMENT: Chemical resistant filter bodies, high temperature bodies and screen spools.

HP COVER RESIN: Chemical resistant and high temperature covers. (Isoplast)

POLYCARBONATE COVER: Standard filter covers. (Lexan)

ETHYLENE / PROPYLENE "O" RINGS: Standard on all of the products.
(EPDM: ethylene propylene diene monomer)

	PVC Body / Element	Polypropylene HT Body / Element	Polyester Mesh	316 Stainless Steel Mesh	HP Cover Resin	Polycarbonate Cover	Ethylene/Propylene "O" rings	Viton "O" rings
Acetic Acid-50% 70 deg F	A	A	B	*	A	B	B	C
Acetic Acid-90% 70 deg F	D	B	C	A	*	D	B	C
Acetone-up to boiling	D	A	B	A	D	D	A	D
Acetylene-70 deg F	B	A	B	A	A	D	A	A
Alcohols	*	*	*	*	*	*	*	*
Amyl	A	A	*	A	A	C	A	A
Benzyl	D	A	C	B	*	D	B	A
Butyl	A	A	*	A	A	*	A	A
Diacetone	B	A	C	A	*	*	A	D
Ethyl	A	A	*	A	C	*	B	A
Hexyl	B	B	*	A	*	*	B	A
Isopropyl	A	A	A	B	A	A	A	A
Methyl	A	A	A	A	C	B	A	D
Octyl	*	*	*	A	A	*	A	A
Propyl	A	A	A	A	A	A	A	A
Aluminum Chloride-20% 70 deg F	A	A	D	C1	A	A	A	A
Aluminum Fluoride 70 deg F	A	A	D	D	A	*	C	A
Aluminum Hydroxide	A	A	*	C1	A	C	A	A
Aluminum Potassium Sulfate (Alum)	*	*	*	*	*	*	*	*
(Alum)	A	A	*	A	*	A	A	A
Aluminum Sulfate	A	A	A	B2	A	A	A	A
Amines	C	B	C	A	D	D	B	D
Ammonia, Anhydrous	A	A	*	A2	A	D	A	D
Ammonia, Liquids	D	A	A	A2	A	D	A	D
Ammonia, Nitrate	A	A	B	*	*	B	A	A
Ammonium Bifluoride	B	A	*	B1	A	*	*	A
Ammonium Carbonate	A	A	*	B	A	D	A	A
Ammonium Chloride	A	A	A	B2	A	A	A	A
Ammonium Hydroxide (25%)	A	A	B	A1	A	D	A	B
Ammonium Nitrate	A	A	B	A	A	A	A	B
Ammonium Oxalate-% 70 deg F	*	*	*	A	A	A	*	*
Ammonium Persulfate-5% 70 deg F	A	A	B	B	*	*	A	A
Ammonium Phosphate	*	*	*	*	*	*	*	*
Dibasic	A	A	B	C	A	A	A	A
Monobasic	A	A	A	C	A	A	A	A
Tribasic	A	A	A	B	A	A	A	A
Ammonium Sulfate	A	A	A	B	A	A	A	A

	PVC Body / Element	Polypropylene HT Body / Element	Polyester Mesh	316 Stainless Steel Mesh	HP Cover Resin	Polycarbonate Cover	Ethylene/Propylene "O" rings	Viton "O" rings
Amyl Acetate	D	D	C	A	D	D	A	D
Amyl Alcohol	D	A	*	A	A	C	A	A
Amyl Chloride	D	D	B	A2	D	D	D	A
Aniline	D	A	D	B	*	A	B	D
Anti Freeze	A	B	*	A	A	B	A	A
Aqua Regia	*	*	*	*	*	*	*	*
(80%, HCl, 20%, HNO3)	D	B	D	D	*	D	D	B
Arochlor 1248	*	D	C	B	*	D	B	A
Aromatic Hydrocarbons	*	*	*	C	A	D	D	A
Arsenic Acid	A	A	D	A2	A	A	A	A
Asphalt	D	A	B	A	A	D	D	A
Barium Carbonate	A	A	*	B	*	*	A	A
Barium Chloride	A	A	A	A1	*	A	A	A
Barium Cyanide	D	C	*	A2	A	*	A	A
Barium Hydroxide	A	A	A	B	A	D	A	A
Barium Nitrate	A	A	A	B	*	D	A	A
Barium Sulfate	A	A	A	B1	A	D	A	A
Barium Sulfide	A	A	*	B2	A	*	A	A
Beer	A	A	A	A	A	A	A	A
Beet Sugar Liquids	A	A	*	A	A	*	A	A
Benzaldehyde	D	B	B	B	D	C	A	D
Benzene	D	B	C	B	A	D	D	A
Benzoic Acid	A	A	B	B	*	A	D	A
Benzol	*	A	*	A1	*	*	*	A
Borax (Sodium Borate)	A	A	B	A	A	B	A	A
Boric Acid	A	A	A	A1	A	A	A	A
Brewery Slop	*	*	*	A	*	*	*	A
Bromine	D	B	D	D	*	C	D	A
Butadine	D	D	*	A1	A	D	A	A
Butane	A	A	B	A2	A	D	D	A
Butter	*	*	*	A	A	*	A	A
Buttermilk	A	A	A	A	A	A	*	A
Butylene	A	B	*	A	A	D	D	A
Butyl Acetate	D	B	C	A	*	D	B	D
Butyric Acid	D	A	D	B2	*	D	B	D
Calcium Bisulfide	A	A	A	B	A	*	D	A
Calcium Carbonate	A	A	*	B	*	C	A	A
Calcium Chloride	A	A	A	B2	A	B	A	A
Calcium Hydroxide	A	A	D	B	A	D	A	A

	PVC Body / Element	Polypropylene HT Body / Element	Polyester Mesh	316 Stainless Steel Mesh	HP Cover Resin	Polycarbonate Cover	Ethylene/Propylene "O" rings	Viton "O" rings
Hexane	D	B	B	A	A	B	D	A
Honey	*	*	*	A	*	*	A	A
Hydraulic Oils (petroleum)	B	D	A	A	A	A	D	A
Hydraulic Oils (synthetic)	C	D	A	A	A	*	A	C
Hydrazine	D	C	D	A	*	*	A	A
Hydrobromic Acid	A	B	D	D	*	B	A	A
Hydrochloric Acid - 20%	A	A	D	D	A	D	A	A
Hydrochloric Acid - 37%	A	A	D	D	*	D	C	A
Hydrocyanic Acid	A	A	A	A	*	*	A	A
Hydrofluoric Acid - 20%	C	A	A	D	*	B	A	A
Hydrofluoric Acid - 50%	C	C	A	D	*	D	A	A
Hydrofluoric Acid - 75%	D	D	D	D	*	D	C	A
Hydrofluosilicic Acid - 20%	C	A	D	B1	*	A	A	A
Hydrogen Peroxide	A	A	A	A2	A	A	C	A
Hydrogen Sulfide	*	*	A	*	*	*	*	*
Aqueous Solution	A	A	A	A	*	B	A	A
Hydroxyacetic Acid - 70%	A	*	*	*	*	*	A	A
Ink	*	*	*	C	A	*	*	*
Iodine	D	A	D	D	*	*	B	A
Isotane	A	A	A	*	*	B	*	*
Isopropyl Acetate	D	B	C	A	D	D	B	D
Isopropyl Ether	D	A	*	A	*	*	D	D
Jet Fuel (JP3, JP4, JP5)	A	A	A	A	A	A	D	A
Kerosene	A	A	A	A	A	A	D	A
Ketones	D	A	B	A	D	D	A	D
Lacquers	D	B	B	A	A	D	D	D
Lactic Acid	A	A	A	B1	A	A	A	A
Lard	A	A	A	A	A	A	B	A
Latex	A	A	*	A2	A	*	*	A
Lead Acetate	A	A	A	B1	A	*	A	D
Lead Sulfamate	A	A	*	C	A	A	A	A
Ligroin	*	B	*	A	*	*	D	A
Lime	A	A	A	A	A	*	A	A
Lubricants	A	A	B	A2	A	C	D	A
Magnesium Carbonate	A	A	*	B1	A	A	A	A
Magnesium Chloride	A	A	A	D	A	A	A	A
Magnesium Hydroxide	A	A	C	A1	A	A	A	A
Magnesium Nitrate	A	A	A	B1	A	A	A	A
Magnesium Oxide	*	*	*	A	*	*	*	*

	PVC Body / Element	Polypropylene HT Body / Element	Polyester Mesh	316 Stainless Steel Mesh	HP Cover Resin	Polycarbonate Cover	Ethylene/Propylene "O" rings	Viton "O" rings
Aniline	C	A	D	A	*	C	B	A
Bay	*	*	*	A	*	*	*	A
Bone	*	*	*	A	*	*	*	A
Castor	A	*	*	A	*	*	B	A
Citric	*	*	*	A	*	*	*	A
Clove	*	*	*	A	*	*	*	*
Coconut	*	*	*	A	A	B	A	A
Cod Liver	*	*	*	A	A	*	A	A
Corn	*	A	*	A	A	B	C	A
Cotton Seed	A	A	A	A	A	A	C	A
Creosote	B	B	D	B	*	C	D	A
Diesel Fuel (20, 30, 40, 50)	A	A	A	A	A	A	D	A
Fuel (1, 2, 3, 5A, 5B, 6)	*	A	A	B	A	A	B	D
Ginger	*	*	*	D	*	*	*	A
Hydraulic (see hydraulic)	B	D	A	A	A	A	*	*
Lemon	*	*	*	A	*	*	*	A
Linseed	A	A	A	A	*	A	D	A
Mineral	A	A	A	A	*	A	D	*
Olive	A	A	A	A	A	A	*	A
Orange	*	*	*	A	*	*	*	A
Palm	A	*	*	A	A	*	*	A
Peanut	A	*	*	A	A	*	*	A
Peppermint	*	*	*	A	*	*	*	A
Pine	A	*	*	A	A	*	*	A
Rape Seed	A	*	*	A	*	*	*	A
Rosin	C	A	*	A1	A	*	*	A
Sesame Seed	A	*	*	A	A	*	*	A
Silicone	A	A	*	A	*	A	*	A
Soybean	A	A	A	A	A	A	*	A
Sperm	A	*	*	A	A	*	*	A
Tanning	A	A	*	A	*	*	*	A
Turbine	A	*	*	A	A	*	*	A
Oleic Acid	A	A	A	A	*	A	D	A
Oleum	D	D	*	A	*	*	D	A
Oxalic Acid (cold)	A	A	B	A	*	B	A	A
Paraffin	A	A	*	A	*	A	*	A
Pentane	C	*	A	C	A	A	D	A
Perchloroethylene	C	D	C	A1	*	D	D	A
Petrolatum	*	*	*	A	A	*	A	A

	PVC Body / Element	Polypropylene HT Body / Element	Polyester Mesh	316 Stainless Steel Mesh	HP Cover Resin	Polycarbonate Cover	Ethylene/Propylene "O" rings	Viton "O" rings
Phenol (Carbolic Acid)	A	A	*	B	D	*	D	A
Phosphoric Acid (to 40% solution)	*	*	*	*	*	*	*	*
Phosphoric Acid (40% - 100% solution)	A	A	A	*	A	A	B	A
Phosphoric Acid (Crude)	*	*	*	B	*	*	B	A
Photographic Developer	A	A	A	A	*	A	*	A
Plating Solutions	*	*	*	*	*	*	*	*
Antimony	A	A	A	A	A	A	*	A
Arsenic	A	A	*	A	A	*	*	A
Brass	A	A	*	A	*	*	A	A
Bronze	A	A	*	A	*	*	*	A
Cadmium	A	A	*	A	*	*	A	A
Chrome	A	A	*	*	*	*	A	A
Copper	A	A	*	*	*	*	A	A
Gold	A	A	*	*	*	*	A	A
Indium	A	A	*	C	*	*	*	A
Iron	A	A	*	*	*	*	*	A
Lead	A	A	*	C	*	*	*	A
Nickel	A	A	*	*	*	*	*	A
Silver	A	A	*	A	*	*	A	A
Tin	A	A	*	C	*	*	A	A
Zinc	A	A	*	*	*	*	A	A
Potash	A	A	*	B	*	*	A	A
Potassium Bicarbonate	A	A	A	B	A	*	*	A
Potassium Bromide	A	A	A	B	*	A	A	A
Potassium Carbonate	A	A	A	B	A	*	A	A
Potassium Chlorate	A	A	A	B	A	*	A	A
Potassium Chloride	A	A	A	A1	A	A	A	A
Potassium Chromate	A	A	*	B1	*	*	A	A
Potassium Cyanide Solutions	A	A	*	B1	A	*	A	A
Potassium Dichromate	A	A	B	B1	*	A	A	A
Potassium Hydroxide	A	A	C	A1	A	D	A	A
Potassium Nitrate	A	A	A	B	A	A	A	A
Potassium Permanganate	A	A	D	B	*	A	A	A
Potassium Sulfate	A	A	A	A	A	A	A	A
Propane (Liquified)	B	A	A	A	*	C	D	A
Propylene Glycol	C	A	*	B	A	B	*	A
Pyridine	D	A	C	A	*	D	B	D
Pyroglic Acid	A	A	*	B	*	*	*	A

