



Chemical Compatibility of Fabrics with Common Chemicals

Organic Acids

A=Excellent Suitability B=Limited Suitability C=Not Recommended

Max. Operating Temperature °F	Dralon T® (Poly Acrylic) 275	Acrylic (Poly Acrylic) 275	Nomex® 375	Polyester 275	Polypropylene 170	Teflon® 500	Glass 500	P84 500
Acetic Acid (C ₂ H ₄ O ₂)	A	A	A	A	A	A	A	B
Benzoic Acid (C ₇ H ₆ O ₂)	A	A	B	A	A	A	A	B
Phenol (C ₆ H ₆ O) (Carbolic Acid)	A	A	C	B	A	A	C	B
Formic Acid (CH ₂ O ₂)	A	A	B	A	A	A	A	C
Lactic Acid (C ₃ H ₆ O ₃)	A	A	B	A	A	A	B	B
Oxalic Acid (C ₂ H ₂ O ₄) (Acid of Sugar)	A	A	C	A	A	A	A	B
Salicylic Acid (C ₇ H ₈ O ₃)	A	A	B	A	A	A	C	B



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Mineral Acids

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Max. Operating Temperature °F	Dralon T® (Poly Acrylic) 275	Acrylic (Poly Acrylic) 275	Nomex® 375	Polyester 275	Polypropylene 170	Teflon® 500	Glass 500	P84 500
Chromium Trioxide (Cr O ₃) (Chromic Acid Anhydride)	A	A	C	A	B	A	A	B
Hydrogen Chloride (H Cl) (Hydrochloric Acid) (Muriatic Acid)	A	A	C	A	A	A	A	B
Hydrofluoric Acid (HF)	A	A	C	B	A	A	C	B
Nitric Acid (HN O ₃)	A	A	B	A	B	A	A	B
Triphotic Acid (HO) ₃ P(O)	A	B	A	A	A	A	A	B
Sulphuric Acid (H ₂ SO ₄) (Sulphuric Acid) (Vitrol)	B	B	B	B	A	A	A	B



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Oxidizing Agents

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Bromine Calcium (Br)	B	B	-	B	A	A	A	B
Calcium Hypochlorite (Ca(OCl) ₂)	A	A	-	A	A	A	A	B
Carbon (C) (Graphite/Diamond)	B	B	-	B	A	A	A	B
Fluorine (F)	B	B	-	B	A	A	C	B
Hydrogen Peroxide (H ₂ O ₂)	A	A	-	B	A	A	A	B
Iod	A	A	-	A	A	A	A	B
Ozone (O ₃)	A	A	-	-	B	A	A	B
Potassium Chloride (K Cl) (Sylvine)	A	A	B	A	A	A	A	B
Sodium Chlorate (Na Cl O ₃)	-	A	-	-	A	A	A	B
Sodium Hypochlorite (Na OCl) (Eau-de-Labarraque)	B	A	-	B	B	A	A	B



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Organic Solvents

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Max. Operating Temperature °F	Dralon T® (Poly Acrylic) 275	Acrylic (Poly Acrylic) 275	Nomex® 375	Polyester 275	Polypropylene 170	Teflon® 500	Glass 500	P84 500
Methanol (CH ₄ O)	A	A	A	A	A	A	A	C
MEK	A	A	A	A	B	A	A	B
Nitrogen (N)	A	A	A	A	B	A	A	B
Ethylenes trichloro (C ₂ H CL ₃)	A	A	A	A	A	A	A	B
Methyl Benzene (C ₆ H ₅ CH ₃) (Toluene)	A	A	A	A	B	A	A	C
O-Xylene (C ₆ H ₄ (CH ₃) ₂)	A	A	A	A	B	A	A	C



Properties of Filtration Fabrics

Temp. °F	Polypropylene 170	Polyester 275	Acrylic 275	Fiberglass® 500	Nomex® 375	Ryton® 375	P-84™ 500	Teflon® 500
Abrasion Energy	Excellent	Excellent	Good	Fair	Good	Good	Good	Excellent
Absorption	Good	Excellent	Good	Fair	Good	Good	Good	Good
Filtration Properties	Good	Excellent	Good	Fair	Excellent	Very Good	Excellent	Fair
Moist Heat Hydrolysis	Excellent	Poor	Excellent	Excellent	Good	Excellent	Good	Excellent
Alkalines	Excellent	Good	Fair	Fair	Good	Excellent	Fair	Excellent
Mineral Acids	Excellent	Fair	Good	Poor**	Poor	Excellent	Good	Excellent
Oxygen (15%+)	Excellent	Excellent	Excellent	Excellent	Excellent	Poor	Excellent	Excellent
Relative Cost	X	X	XX	XXX	XXXX	XXXXX	XXXXXX	XXXXXXX

* Sensitive bag-to-cage fit

** Fair with acid resistant finishes

Note: Combinations of variables alter the resistance of the fiber to the specified performance ratings, i.e., time, temperature and gas stream chemistry.



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Salts

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Max. Operating Temperature °F	Dralon T® (Poly Acrylic) 275	Acrylic (Poly Acrylic) 275	Nomex® 375	Polyester 275	Polypropylene 170	Teflon® 500	Glass 500	P84 500
Calcium Chloride (Ca Cl ₂)	A	A	B	A	A	A	B	B
Ferrous Chloride (Fe Cl ₂ 4H ₂ O)	A	A	B	A	A	A	C	B
Sodium Acetate (C ₂ H ₄ Na O ₂)	A	A	B	A	A	A	B	B
Sodium pyrosulfite (Na ₂ O ₅ S ₂) (metan sulfite)	C	A	B	A	A	A	A	B
Sodium Bromide (Na Br)	A	A	A	A	A	A	C	C
Sodium Perchbrate (Cl Na O ₄)	A	A	A	A	A	A	-	B
Sodium Cyanide (Na Cn)	A	A	B	A	A	A	B	B
Sodium Nitrate (Na NO ₃) (Chile Saltpeter)	A	A	B	A	A	A	B	B
Sodium Sulfate (Na ₂ SO ₄) (Glaubers Salt)	A	A	A	A	A	A	B	B
Sodium Sulfide (Na ₂ S)	A	A	A	A	A	A	B	B
Zinc Chloride (Cl ₂ Zn)	B	B	B	A	A	A	C	C