

Chemical Resistance, XR-5® Membranes

Exposure	Rating
AFFF (Aqueous Fire Fighting Foam)	A
Acetic Acid (5%)	A
Acetic Acid (50%)	B
Acrylonitrile (10%)	A
Ammonium Phosphate	T
Ammonium Sulfate	X
Antifreeze (Ethylene Glycol)	A
Animal Oil	A
Aqua Regia	X
ASTM Fuel A (100% Iso-Octane)	A
ASTM Oil #2 (Flash Pt. 240° C)	A
ASTM Oil #3	A
Benzene	C
Black Liquor (Typical)	A
Biodiesel	B
Calcium Chloride Solutions	T
Calcium Hydroxide	T
Chloramine - PW (0.05%)	A
Chloramine - PW (1%)	A
Chlorobenzene	C
20% Chlorine Solution	A
Chlorine - PW (2 mg/l)	A
Citric Acid	A
Clorox	A
Conc. Ammonium Hydroxide	A
Corn Oil	A
Crude Oil	A

Exposure	Rating
Diesel Fuel	A
Dimethyl Sulfoxide (10%)	A
Ethanol (Ethyl Alcohol)	A
Ethyl Acetate	C
Ethylene Dichloride	C
Ethylene Dichloride 0.1%	A
Ferric Chloride	A
Flowback/ Produced Water (typical)	A
#2 Fuel Oil	A
#6 Fuel Oil	A
Furfural	C
Gasoline	B
Glycerin	A
Heptane	A
Hexane	A
Hydraulic Fluid (Petroleum Based)	A
Hydraulic Fluid (Phosphate Ester Based)	C
Hydrocarbon Type II (40% Aromatic)	C
Hydrochloric Acid (36%)	A
Hydrochloric Acid (50%)	A
Hydrofluoric Acid (5%)	A
Hydrofluoric Acid (50%)	A
Hydrofluosilicic Acid (30%)	A
Hydrogen Peroxide (2%, 3%, 35%)	T
Isopropyl Alcohol (2-propanol)	T
Ivory Soap	A
Jet A	A

Exposure	Rating
JP-4 Jet Fuel	A
JP-5 Jet Fuel	A
JP-8 Jet Fuel	A
Kerosene	T
Liquid Nitrogen Fertilizer (28%)	A
Magnesium Chloride	T
Magnesium Hydroxide	T
Methanol (Methyl Alcohol)	A
Methyl Ethyl Ketone	C
Mineral Spirits	A
Municipal Landfill Leachate (typical)	A
N-Serve® Nitrogen Stabilizer	C
Naphtha (White Gas)	A
Naphtha (TT-N-95B NOT.2 TYPE I)	A
Natural Gas Condensate Synthetic Solution	A
Nitric Acid (5%)	B
Nitric Acid (50%)	C
Palm Oil	A
Palm Oil (140° F)	A
Peracetic Acid - PW (15%)	A
Perchloroethylene	C
Phenol	C
Phenol Formaldehyde	B
Phosphoric Acid (50%)	A
Phosphoric Acid (85%)	A
Phosphoric Acid (100%)	C
Phosphoric Chek® 075 Fire Retardant (60%)	A

Exposure	Rating
Phthalate Plasticizer	C
Potassium Acetate (50%)	A
Potassium Chloride	T
Potassium Sulphate	T
Propylene Glycol	A
Raw Linseed Oil	A
Roundup®	A
SAE-30 Oil	A
Salt Water (25%)	B
Sea Water	A
Shell Diala® Transformer Oil	A
Sodium Acetate Solution	T
Sodium Bisulfite Solution	T
Sodium Chloride	A
Sodium Hydroxide (60%)	C
Sodium Hypochlorite (15%)	A
Sodium Hypochlorite - PW (1%)	A
Sodium Hypochlorite - PW (500 mg/l)	A
Sodium Hypochlorite - PW (50 mg/l)	A
Sodium Phosphate	T
Soybean Oil	A
Styrene Monomer	C
Sulfuric Acid (50%)	A
Sulfuric Acid ((10%, 140° F)	A
Tanic Acid (50%)	A
THF - Tetrahydrofuran	C
THF - Tetrahydrofuran (9%)	A

Exposure	Rating
Toluene	C
Transformer Oil	A
Turpentine	A
Urea Formaldehyde	A
UAN (28%) Urea Ammonium Nitrate	A
Varsol	A
Vegetable Oil	A
Water	A
Water (Deionized)	A
Water (LSI -5)	A
Water (180°F)	A
Xylene	C
Zinc Chloride	T

Rating Key:

- A** - Fluid has little or no effect
- B** - Fluid has minor to moderate effect
- C** - Fluid has severe effect
- T** - No data - likely to be acceptable
- X** - No data - not likely to be acceptable

Notes:

1. Results of visual and physical strength testing after 30 days minimum of constant exposure at room temperature.
2. All solutions are 100% unless indicated otherwise.
3. All XR-5® samples simulate field conditions with the treated base fabric exposed at edges.
4. XR-5® samples are completely submerged.
5. Solutions not on this chart should be tested prior to application.
6. "PW" refers to XR-5® PW products