

Chemical Resistance, XR-5® Membranes

Exposure	Rating	Exposure	Rating	Exposure	Rating	Exposure	Rating	Exposure	Rating
AFFF (Aqueous Fire Fighting Foam)	A	Dimethyl Sulfoxide (10%)	A	JP-4 Jet Fuel	A	Phosphoric Chek® 075 Fire Retardant (60%)	A	Turpentine	A
Acetic Acid (5%)	B	Envirotemp® FR3	A	JP-5 Jet Fuel	A	Phthalate Plasticizer	C	Urea Formaldehyde	A
Acetic Acid (50%)	C	Ethanol	A	JP-8 Jet Fuel	A	Potassium Acetate (50%)	A	UAN (28%) Urea Ammonium Nitrogen	A
Acrylonitrile (10%)	A	Ethyl Acetate	C	Kerosene	T	Potassium Chloride	T	Varsol	A
Ammonium Phosphate	T	Ethyl Alcohol	A	Liquid Nitrogen Fertilizer (28%)	A	Potassium Sulphate	T	Vegetable Oil	A
Ammonium Sulfate	T	Ethylene Dichloride	C	Magnesium Chloride	T	Raw Linseed Oil	A	Water	A
Antifreeze (Ethylene Glycol)	A	Ethylene Dichloride 0.1%	A	Magnesium Hydroxide	T	Roundup®	A	Water (Deionized)	A
Animal Oil	A	Ferric Chloride	A	Methanol	A	SAE-30 Oil	A	Water (LSI -5)	A
Aqua Regia	X	Flowback/ Produced Water (typical)	A	Methyl Alcohol	A	Salt Water (25%)	B	Water (180°F)	A
ASTM Fuel A (100% Iso-Octane)	A	#2 Fuel Oil	A	Methyl Ethyl Ketone	X	Sea Water	A	White Gas	A
ASTM Oil #2 (Flash Pt. 240° C)	A	#6 Fuel Oil	A	Mineral Spirits	A	Shell Diala® Transformer Oil	A	Xylene	C
ASTM Oil #3	A	Furfural	X	Municipal Landfill Leachate (typical)	A	Sodium Acetate Solution	T	Zinc Chloride	T
Benzene	X	Gasoline	B	N-Serve® Nitrogen Stabilizer	C	Sodium Bisulfite Solution	T		
Black Liquor (Typical)	A	Glycerin	A	Naphtha (White Gas)	A	Sodium Hydroxide (60%)	A		
Biodiesel	B	Hexane	A	Naphtha (TT-N-95B NOT.2 TYPE I)	A	Sodium Hypochlorite (15%)	A		
Calcium Chloride Solutions	T	Hydraulic Fluid (Petroleum Based)	A	Natural Gas Condensate Synthetic Solution	A	Sodium Hypochlorite - PW (1%)	A		
Calcium Hydroxide	T	Hydraulic Fluid (Phosphate Ester Based)	C	Nitric Acid (5%)	B	Sodium Hypochlorite - PW (500 mg/l)	A		
Chloramine - PW (0.05%)	A	Hydrocarbon Type II (40% Aromatic)	C	Nitric Acid (50%)	C	Sodium Hypochlorite - PW (50 mg/l)	A		
Chloramine - PW (1%)	A	Hydrochloric Acid (36%)	A	Palm Oil	A	Sodium Phosphate	T		
Chlorobenzene	X	Hydrochloric Acid (50%)	A	Palm Oil (140° F)	A	Styrene Monomer	C		
20% Chlorine Solution	A	Hydrofluoric Acid (5%)	A	Peracetic Acid - PW (15%)	A	Sulfuric Acid (50%)	A		
Chlorine - PW (2 mg/l)	A	Hydrofluoric Acid (50%)	A	Perchloroethylene	C	Sulfuric Acid ((10%, 140° F)	A		
Clorox	A	Hydrofluosilicic Acid (30%)	A	Phenol	X	Tanic Acid (50%)	A		
Conc. Ammonium Hydroxide	A	Hydrogen Peroxide (2%, 3%, 35%)	T	Phenol Formaldehyde	B	THF - Tetrahydrofuran	X		
Corn Oil	A	Isopropyl Alcohol	T	Phosphoric Acid (50%)	A	THF - Tetrahydrofuran (9%)	A		
Crude Oil	A	Ivory Soap	A	Phosphoric Acid (85%)	A	Toluene	C		
Diesel Fuel	A	Jet A	A	Phosphoric Acid (100%)	C	Transformer Oil	A		

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

