



CHEMICAL RESISTANCE CHART FOR POLYETHYLENE PLASTICS

Chemical	Concentration	Resin	Design Info	Fitting Material	Gasket Material	Bolt Material
Acetic Acid	60	HDLPE & XLPE	1.5/ASTM	PP/PVC	EPDM	316SS/Hastelloy/Titan.
Acetic Acid	80	HDLPE	1.9/ASTM	PP	EPDM	316SS/Hastelloy/Titan.
Acrylic Emulsions	50	XLPE	1.9/ASTM	PVC	EPDM	316SS
Aluminum Sulfate	50	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
Ammonium Sulfate	40	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
Calcium Carbonate	Saturated	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS
Calcium Chloride	40	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
DEF (Diesel Exhaust Fluid)	32.5	HDLPE & XLPE	1.35/ASTM	316SS	EPDM	316SS
Deionized Water <5 Megohm		HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS
Deionized Water >5 Megohm		HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS
Ethyl Alcohol	100	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS
Ethylene Glycol	100	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS
Ferric Chloride	50	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	Hastelloy/Titan.
Ferric Sulfate	60	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
Ferrous Chloride	Saturated	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	Hastelloy/Titan.
Ferrous Sulfate	20	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	Hastelloy
Hydrochloric Acid	37	HDLPE	1.9/ASTM	PVC	Viton	Hastelloy
Hydrofluoric Acid	48	HDLPE	1.9/ASTM	PP/PVC	Viton	Hastelloy
Hydrofluosilicic Acid	26	HDLPE/XLPE*	1.9/ASTM	PP/PVC	Viton	Hastelloy
Hydrogen Peroxide	50	HDLPE	1.9/ASTM	PVC	Viton	316SS/Hastelloy/Titan.
Isopropyl Alcohol	100	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS
Magnesium Chloride	30	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
Methyl Alcohol	100	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS
Motor Oil	100	HDLPE & XLPE	1.9/ASTM	316SS	Viton	316SS
Phosphoric Acid	85	HDLPE	1.9/ASTM	PVC	Viton	316SS
Phosphoric Acid	50	HDLPE	1.9/ASTM	PVC	Viton	316SS
Polymers (Deposition)		XLPE	1.5/ASTM	PVC	EPDM	316SS
Potable Water		HDLPE	1.5/ASTM	PVC	EPDM	316SS
Potassium Carbonate	50	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS
Potassium Hydroxide	Saturated	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS
Sodium Carbonate	30	HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
Sodium Carbonate	Saturated	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS**/Hastelloy/Titan.
Sodium Hydroxide	50	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS
Sodium Hypochlorite-in(Non-UV)	<16.5	HDLPE	1.9/ASTM	PVC	Viton	Titanium
Sodium Hypochlorite-out (UV)	<16.5	HDLPE #880059	1.9/ASTM	PVC	Viton	Titanium
Sodium Hypochlorite-out (UV)	<16.5	HDLPE Insulated	1.9/ASTM	PVC	Viton	Titanium
Sodium Thiosulfate	40	HDLPE & XLPE	1.9/ASTM	PVC	EPDM	316SS
Sulfuric Acid	98	HDLPE #880046*	1.9/ASTM	CPVC	Viton	Hastelloy
Sulfuric Acid	93	HDLPE #880046*	1.9/ASTM	CPVC	Viton	Hastelloy
Surfactants		XLPE	1.5/ASTM	PVC	EPDM	316SS
Urea Solution	50	HDLPE & XLPE	1.35/ASTM	PP/PVC	EPDM	316SS
Water w/Ozone up to 10 PPM		HDLPE & XLPE	1.5/ASTM	PVC	EPDM	316SS

Note: All information above is based on ambient temperatures

*Chemical may cause tank material to discolor.

Any chemicals or chemical blends information not listed above may be available, please contact Elkhart Plastics

Please review "Compass Publication on Chemical Resistance Guide for Plastics" for verification of chemical compatibility