

## TECHNICAL BULLETIN

### Chemical Resistance Chart

Date: May 3, 2007

**SUBJECT:** CORROSION & CHEMICAL COMPOUND RESISTANCE COMMON COMPONENTS & INDUSTRY FACINGS

COMPOUND	LDPE	HDPE	PP	PVC	Alum	C. Steel	T-316 SS	T-304 SS
Acetic Acid, Glacial	2	1	2	4	1	4	1	3
Acetone	4	4	1	4	1	1	1	1
Acetonitrile	1	1	3	4	2	1	1	1
Acrylonitrile	1	1	3	4	2	1	1	1
Alcohols:								
Amyl	1	1	XXX	5	2	2	1	1
Benzyl	4	3	4	3	2	2	1	1
Ethyl	2	1	2	3	2	2	1	1
Hexyl	2	2	XXX	5	1	1	1	1
Isobutyl	1	1	1	3	2	5	1	1
Isopropyl	1	1	1	3	2	1	1	1
Methyl	1	1	1	3	1	1	1	1
Aluminum Hydroxide	2	1	2	2	2	5	3	1
Ammonium Chloride	XXX	1	XXX	5	3	4	4	3
Ammonium Hydroxide	2	1	2	3	2	4	1	1
Amyl Acetate	3	2	3	4	1	2	1	1
Amyl Chloride	4	3	4	4	1	1	1	1
Aniline	2	2	3	4	3	2	2	1
Benzaldehyde	2	1	2	4	2	1	2	2
Benzene	4	4	4	4	2	1	2	2
Bromine	4	4	4	4	4	4	4	4
Butadiene	4	4	4	4	1	1	1	1
Butyric Acid	4	4	4	4	2	4	2	2
Calcium Hydroxide	1	1	1	2	3	3	2	3
Calcium Hypochlorite	1	1	1	4	4	4	2	3
Chloroform	4	4	4	4	2	2	1	2
Cresols	4	4	3	4	1	1	1	1
Cyclohexane	4	4	4	4	1	2	1	1
Cyclohexanone	4	4	4	4	1	2	1	1
Diethylamine	4	4	3	4	2	1	2	5
Diethylene Glycol	1	1	1	4	2	5	1	1
Ethyl Acetate	1	1	1	4	2	1	2	2
Ethylene Glycol	1	1	1	4	2	1	1	1
<b>1 = Excellent</b>	<b>2 = Good</b>	<b>3 = Fair</b>	<b>4 = Not Advised</b>	<b>XXX = Not Tested</b>				

P.O. Box 755  
 Ennis, TX 75120  
 PH: (214) 515-5000  
 FX: (972) 875-9425

This information is based on our best knowledge, but POLYGUARD cannot guarantee the results to be obtained.

Proud Member of  
**NIA** National Insulation Association

COMPOUND	LDPE	HDPE	PP	PVC	Alum	C. Steel	T-316 SS	T-304 SS
Fatty Acids	2	1	2	2	1	4	1	2
Formaldehyde 40%	2	1	2	4	2	1	1	1
Gasoline	4	2	3	4	1	1	1	1
Heptane	4	3	3	4	1	1	1	1
Hexane	4	3	3	4	1	1	1	1
Hydrazine	4	4	4	4	5	4	1	1
Hydrochloric acid 20%	1	1	1	2	4	4	4	4
Hydrochloric acid 100%	XXX	XXX	XXX	4	4	4	4	4
Hydrofluoric acid 20%	1	1	1	1	4	4	4	4
Hydrofluoric acid 100%	XXX	XXX	XXX	5	4	4	2	2
Hydrogen Peroxide 30%	2	1	2	3	1	5	2	2
Isopropyl Acetate	3	2	3	4	2	2	1	3
Kerosene	4	2	3	4	1	1	1	1
Mercury	1	1	1	3	5	1	1	1
Methyl Acetate	4	3	3	4	1	1	1	1
Methyl Ethyl Ketone	4	4	2	4	1	1	1	1
Methylene Chloride	4	4	4	4	1	2	2	2
Mineral Spirits	4	4	4	4	1	5	1	1
Nitric Acid 50%	4	4	4	4	3	4	1	1
Nitrobenzene	4	4	4	4	1	2	1	2
Phosphoric Acid 40%	1	1	2	3	2	4	2	1
Potassium Hydroxide 80%	1	1	1	3	4	5	2	2
Propylene Glycol	1	1	1	3	2	1	2	2
Silver Nitrate	2	1	2	2	4	4	2	2
Sodium Hydroxide 80%	2	3	1	3	4	4	3	2
Sodium Hypochlorite 20%	1	1	3	3	4	4	3	3
Sulfuric Acid 10%	1	1	1	2	4	4	2	4
Sulfuric Acid 10% -75%	2	1	2	4	4	4	4	4
Sulfuric Acid 75% -100%	2	2	3	4	4	4	4	3
Tetrachlorethane	XXX	XXX	XXX	4	3	1	1	2
Tetrachloroethylene	XXX	XXX	XXX	4	5	1	1	5
Touene	4	2	3	3	1	1	1	1
Trichloroethane	4	4	4	4	3	2	1	2
Trichloroethylene	4	4	4	4	1	4	2	2
Xylene	3	3	4	4	1	2	1	1
<b>1 = Excellent</b>	<b>2 = Good</b>	<b>3 = Fair</b>	<b>4 = Not Advised</b>	<b>XXX = Not Tested</b>				

The information in this chart reflects general information for general guidelines and should not be used as a substitute for testing and evaluation of chemicals and components. Not to be used for legal advice, or legal opinions. Readers should determine his necessary realizations from his own actual testing and evaluation. Polyguard accepts nor assumes any risks or liabilities for your use of this document or the information contained therein.