

Sani-Armor HDPE Chemical Resistance Chart

Chemical Name	Rating	Chemical Name	Rating	Chemical Name	Rating
Acetate Solvents Pure	1	Antimony Trichloride	1	Chloral Hydrate	2
Acetaldehyde	2	Aqua Regia	NR	Chloric Acid	*
Acetamide	*	Arsenic Acid	1	Chlorinated Water	1
Acetic Solvents Crude	*	Barium Carbonate	1	Chlorine Dry	NR
Acetic Solvents Pure	*	Barium Chloride	1	Chlorine Wet	NR
Acetic Acid 10%	1	Barium Hydroxide	1	Chloroacetic Acid	2
Acetic Acid 20%	1	Barium Sulfate	1	Chlorobenzene	NR
Acetic Acid 50%	1	Barium Sulfide	1	Chloroform	NR
Acetic Acid 80%	2	Beer	1	Chlorosulfonic Acid	NR
Acetic Acid Glacial	1	Beet Sugar Liquors	1	Chrome Alum	1
Acetic Anhydride	NR	Benzaldehyde	NR	Chromic Acid 10%	1
Acetone	NR	Benzene	NR	Chromic Acid 30%	1
Acetophenone	*	Benzene Sulfonic Acid	NR	Chromic Acid 40%	*
Acetyl Chloride	*	Benzoic Acid	1	Chromic Acid 50%	1
Acetylene	*	Benzyl Alcohol	*	Citric Acid	1
Acrylonitrile	*	Benzyl Chloride	*	Coconut Oil	1
Adipic Acid	*	Bismuth Carbonate	1	Copper Carbonate	*
Alcohol Allyl	2	Borax	1	Copper Chloride	1
Alcohol Amyl	1	Boric Acid	1	Copper Cyanide	1
Alcohol Butyl	1	Bromine Liquid	NR	Copper Fluoride	1
Alcohol Ethyl	2	Bromine Water	NR	Copper Nitrate	1
Alcohol Methyl	1	Butadiene	2	Copper Sulfate	1
Alcohol Propyl	2	Butane	2	Cottonseed Oil	1
Allyl Chloride	2	Butyl Acetate	NR	Cresol	NR
Alum	1	Butyl Alcohol	2	Cresylic Acid	NR
Alum Ammonium	1	Butylene	2	Croton Aldehyde	2
Alum Chrome	1	Butyl Phenol	2	Crude Oil	NR
Alum Potassium	1	Butyne Diol	2	Cyclohexane	*
Aluminum Chloride	1	Butyric Acid	2	Cyclohexanol	*
Aluminum Fluoride	1	Butyl Amine	*	Cyclohexanone	NR
Aluminum Hydroxide	1	Butyl Ether	*	Detergent	1
Aluminum Nitrate	1	Butyl Chloride	*	Dextrin	1
Aluminum Sulfate	1	Butyl Phthalate	*	Dextrose	1
Ammonia Anhydrous	*	Calcium Bisulfide	1	Diacetone Alcohol	*
Ammonia Aqueous	*	Calcium Bisulfite	1	Diazo Salts	1
Ammonium Bifluoride	1	Calcium Carbonate	1	Dibutyl Phthalate	*
Ammonium Carbonate	1	Calcium Chlorate	1	Dichlorobenzene	*
Ammonium Chloride	1	Calcium Chloride	1	Dichlorodifluoro Methane	*
Ammonium Fluoride 10%	1	Calcium Hydroxide	1	Dichlorethylene	*
Ammonium Fluoride 25%	1	Calcium Hypochlorite	1	Dichloroethane	*
Ammonium Hydroxide	1	Calcium Nitrate	1	Diesel Fuel	2
Ammonium Metaphosphate	1	Calcium Sulfate	1	Diethylamine	2
Ammonium Nitrate	1	Carbolic Acid	1	Diethylene Glycol	*
Ammonium Persulfate	1	Carbon Dioxide	1	Diethyl Cellosolve	*
Ammonium Phosphate	1	Carbon Disulfide	2	Diethyl Ether	*
Ammonium Sulfate	1	Carbon Monoxide	1	Diglycolic Acid	*
Ammonium Sulfide	*	Carbon Tetrachloride	NR	Dimethylamine	2
Amyl Acetate	NR	Castor Oil	1	Dimethyl Formamide	1
Amyl Chloride	NR	Caustic Potash	1	Dimethyl Sulfoxide	*
Aniline	NR	Caustic Soda	1	Diocetyl Phthalate	NR
Aniline Hydrochloride	NR	Cellosolves	2	Dioxane 1,4	NR



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Dipropylene Glycol	*	Green Liquor	*	Magnesium Carbonate	1
Distilled Water	1	Helium	*	Magnesium Chloride	1
Dizynibenzene	NR	Heptane	NR	Magnesium Hydroxide	1
Epichlorohydrin	*	Hexamine	*	Magnesium Nitrate	1
Ethane	*	Hexane	NR	Magnesium Sulfate	1
Ethanolamine	*	Hexanol Tertiary	2	Maleic Acid	1
Ethers	*	Hydrazine	NR	Malic Acid	*
Ethyl Acetate	2	Hydraulic Fluid (petroleum)	1	Manganese Chloride	1
Ethyl Acetoacetate	*	Hydrobromic Acid (37%)	1	Manganese Sulfate	*
Ethyl Acrylate	2	Hydrochloric Acid (20%)	1	Mercuric Chloride	1
Ethyl Alcohol	2	Hydrochloric Acid (50%)	1	Mercuric Cyanide	1
Ethyl Benzene	1	Hydrocyanic Acid	1	Mercurous Nitrate	1
Ethyl Benzoate	NR	Hydrofluoric Acid (>40%)	1	Mercury	1
Ethyl Butyrate	*	Hydrofluosilicic Acid	*	Methane	1
Ethyl Chloride	NR	Hydrofluorisilicic Acid	*	Methanol	1
Ethyl Ether	NR	Hydrogen Chloride	1	Methyl Acetate	*
Ethyl Sulfate	*	Hydrogen Cyanide	1	Methyl Acetone	*
Ethylene Bromide	NR	Hydrogen Sulfide (wet or dry)	*	Methyl Amine	*
Ethylene Chloride	*	Hydroquinone	1	Methyl Bromide	2
Ethylene Chlorohydrine	NR	Hydroxylamine Sulfate	*	Methyl Cellosolve	*
Ethylene Diamine	NR	Hypo Sodium Thiosulfate	*	Methyl Chloroform	*
Ethylene Dibromide	*	Hypochlorous Acid	2	Methyl Chloride Wet	NR
Ethylene Dichloride	NR	Iodine	2	Methyl Chloride Dry	*
Ethylene Glycol	1	Isobutyl Alcohol	*	Methyl Ethyl Keytone	NR
Ethylene Oxide	NR	Isooctane	*	Methyl Isobutyl Keytone	NR
Fatty Acids	1	Isopropyl Acetate	*	Methyl Salicylate	*
Ferric Chloride (concentrate)	1	Isopropyl Alcohol	*	Methyl Sulfate	NR
Ferric Nitrate	1	Isopropyl Ether	*	Methyl Sulfuric Acid	1
Ferric Sulfate	1	Jet Fuel (JP3,4,5)	*	Methylene Chloride	NR
Ferrous Chloride	1	Kerosene	2	Milk	1
Ferrous Sulfate	1	Keytones	*	Mineral Oil	1
Fish Solubles	1	Lactic Acid	1	Mixed Acids	*
Fluoboric Acid	1	Lacquer Solvents	*	Molasses	1
Formaldehyde	1	LPG (Propane)	*	Morpholine	*
Formic Acid	1	Lard	1	Monochloroacetic Acid	*
Freon Dry	*	Lauric Acid	2	Monochlorobenzene	NR
Freon Wet	*	Lauryl Chloride	NR	Monochlorodifluoromethane	*
Fructose	1	Lead Acetate	1	Monoethanolamine	*
Fruit Juice	1	Lead Molten	NR	Motor Oil	1
Furfurl	NR	Lead Nitrate	*	Mustard	1
Gallic Acid	NR	Lead Sulfamate	*	Naptha	1
Gas Manufactured	NR	Lime	*	Naphthalene	1
Gas Natural	NR	Lime Sulfur	*	Nickel Chloride	1
Gasoline (Leaded)	1	Lineoleic Acid	2	Nickel Nitrate	1
Gasoline (Unleaded)	1	Linseed Oil	1	Nickel Sulfate	1
Gelatin	1	Lithium Chloride	*	Nitric Acid (100%)	NR
Glucose	1	Lithium Hydroxide	*	Nitric Acid (70%)	NR
Glue	*	Lubricating Oil	*	Nitric Acid (50%)	1
Glycerine	1	Lye	1	Nitric Acid (30%)	1
Glycol	1	Machine Oil	*	Nitric Acid (10%)	1
Glycolic Acid	2	Magnesium Bisulfate	1	Nitrobenzene	1



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Nitrous Oxide	*	Potassium Hydroxide	1	Sodium Perborate	*
Ocenol	2	Potassium Hypochlorite	*	Sodium Peroxide	*
Oils & Fat	1	Potassium Iodide	*	Sodium Phosphates	*
Oils, Vegetables	1	Potassium Nitrate (10%)	*	Sodium Silicate	*
Oleic Acid	2	Potassium Permanganate	1	Sodium Sulfate	1
Oxalic Acid	1	Potassium Persulfate	1	Sodium Sulfide	1
Oxygen	1	Potassium Sulfate	1	Sodium Sulfite (90%)	1
Ozone	*	Potassium Sulfide	1	Sodium Thiosulfate	*
Palmitic Acid	1	Potassium Sulfite	1	Sodium Tetraborate	*
Paraffin	1	Propane	*	Soy Bean Oil	1
Pentane	*	Propyl Alcohol	2	Stannic Chloride	1
Perchloroethylene	2	Propylene Glycol	1	Stannous Chloride	1
Perchloric Acid (10%)	1	Propylene Oxide	*	Starch	1
Petroleum	NR	Pyridine	1	Stearic Acid	1
Petroleum Ether	NR	Pyrogallic Acid	*	Stoddard's Solution	*
Phenol	1	Pyroligneous Acid	*	Styrene	*
Phenol Sulfonic Acid	*	Resorcinol	*	Sugar Juice	1
Phenylhydrazine	*	Rosin	*	Sulfate Liquor	*
Phosphoric Acid (10%)	1	Salicylic Acid	1	Sulfainol	*
Phosphoric Acid (25%)	1	Salicylaldehyde	*	Sulfur	1
Phosphoric Acid (50-100%)	1	Salt Brine	1	Sulfur (molten)	NR
Phosphorus	1	Sea Water	1	Sulfur Chloride	*
Phosphorus Trichloride	1	Sewage	1	Sulfur Dioxide Gas (wet)	1
Phosphorus Pentachloride	*	Silicon Oil	1	Sulfur Dioxide Gas (dry)	1
Photographic Solutions	1	Silver Chloride	*	Sulfur Trioxide	1
Phthalic Acid	1	Silver Cyanide	*	Sulfuric Acid (10%)	1
Picric Acid	*	Silver Nitrate	*	Sulfuric Acid (30%)	1
Plating Solutions Brass	1	Soap Solutions	1	Sulfuric Acid (60%)	1
Plating Solutions Cadmium	1	Sodium Acetate (60%)	*	Sulfuric Acid (80%)	2
Plating Solutions Chrome	*	Sodium Acid Sulfate	*	Sulfuric Acid (100%)	NR
Plating Solutions Copper	1	Sodium Benzoate (10%)	1	Sulfurous Acid (10%)	1
Plating Solutions Gold	1	Sodium Bicarbonate	1	Tall Oil	*
Plating Solutions Lead	1	Sodium Bichromate	*	Tannic Acid	*
Plating Solutions Nickel	1	Sodium Bisulfate	1	Tanning Liquor	1
Plating Solutions Silver	1	Sodium Bisulfite	1	Taritar Oil	*
Plating Solutions Tin	1	Sodium Borate	1	Tartaric Acid (10%)	NR
Plating Solutions Zinc	1	Sodium Bromide	1	Tetrachloroacetic Acid	*
Potassium Acetate (50%)	*	Sodium Carbonate	1	Tetrachloroethane	*
Potassium Aluminum Sulfate	1	Sodium Chlorate	1	Tetrachloroethylene	*
Potassium Bicarbonate (60%)	*	Sodium Chromate	*	Tetraethyl Lead	*
Potassium Bichromate (5%)	1	Sodium Cyanide	1	Tetrahydrofuran	NR
Potassium Bromide (10%)	1	Sodium Dichromate	1	Tetrahydronaphthalene	*
Potassium Carbonate	1	Sodium Ferricyanide	1	Tetraphosphoric Acid	*
Potassium Chlorate	*	Sodium Ferrocyanide	1	Thionyl Chloride	NR
Potassium Chloride	1	Sodium Fluoride	1	Tin Tetrachloride	*
Potassium Chromate	1	Sodium Hydroxide	1	Titanium Tetrachloride	*
Potassium Cyanide	1	Sodium Hypochlorite	*	Toluene	NR
Potassium Dichromate (5%)	1	Sodium Hyposulfite	*	Tomato Juice	*
Potassium Ferricyanide	1	Sodium Metaphosphate	*	Tributyl Citrate	*
Potassium Ferrocyanide	*	Sodium Nitrate	1	Tributyl Phosphate	*
Potassium Hydrate	*	Sodium Nitrite	1	Transformer Oil	1



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Trichloroacetic Acid	*	Turpentine	NR	Water, Deionized	1
Trichloroethane	*	Undecanol	*	Water, Demineralized	1
Trichloroethylene	NR	Urea	1	Water, Salt	1
Trichlorotrifluoroethane	*	Urine	1	Whiskey	1
Tricresyl Phosphate	*	Varnish	*	White Spirit	1
Triethanolamine	NR	Vinegar	1	Wine	1
Triethylamine	*	Vinyl Acetate	2	Xylene	NR
Triethylamine Glycol	*	Vinyl Chloride	*	Zinc Chloride	1
Trisodium Phosphate	*	Vinylidene Chloride	*	Zinc Cyanide	*
Tripopylene Glycol	*	Water, Fresh	1	Zinc Nitrate	1
Trisodium Phosphate	1	Water, Acid Mine	1	Zinc Stearate	*
Tung Oil	*	Water, Distilled	1	Zinc Sulfate	1

- 1 <15% loss in property values. Little or no chemical attack.
 2 15-30% loss in property values. Minor chemical attack.
 3 30-50% loss in property values. Moderate chemical attack.
 NR Not recommended. >50% loss in property values.
 * No data available.
 Note: All testing done at ambient temperature (+/- 70°F or 21°C)

Note: All data presumed to be correct. Information must be verified by user by independent tests based on application. Plastruct not liable for errors in data.

