

Chemical Compatibility Guide - Galvanized Steel



For UltraTech Spill Containment Products

This listing was prepared to provide guidance to the chemical compatibility of UltraTech Spill Containment Products which are manufactured and constructed of galvanized steel. Galvanized steel is susceptible to attack by some chemicals which may cause corrosion. This may negatively impact the physical properties of the galvanized steel. When considering an UltraTech galvanized steel product for use in secondary containment applications, it is important to note that most secondary containment products are designed to hold leaked chemicals for only hours per day - at most a week.

These secondary containment units would then be cleaned of any chemicals. In these short-term applications, a greater variety of chemicals may be used with galvanized steel since the exposure time of the chemicals to the steel is limited.

A = depth of corrosion ≤ 0.002 inches / year B = depth of corrosion ≤ 0.020 inches / year C = depth of corrosion ≤ 0.050 inches / year NR = Not recommended

User testing may prove that some of these chemicals are suitable for secondary containment applications with longer exposure time and/or higher temperatures than noted in the list.

Chemical	Rating	Temperature	Chemical	Rating	Temperature	Chemical	Rating	Temperature	Chemical	Rating	Temperature
Acetic Acid, <5%	A	70°F (21°C)	Diacetone Acid	A	70°F (21°C)	Isophorone	A	70°F (21°C)	Propyl Acetate	A	70°F (21°C)
Acetone	B	70°F (21°C)	Dibutyl Ether	A	70°F (21°C)	Isopropyl Acetate	A	70°F (21°C)	N-Propyl Bromide	A	70°F (21°C)
Acetonitrile	A	70°F (21°C)	Dibutyl Phthalate	A	70°F (21°C)	Isopropyl Alcohol	A	70°F (21°C)	Propylene Dichloride	A	70°F (21°C)
Acetophenone	A	70°F (21°C)	Dichlorodiphenyl Trichloroethane, 5%	B	77°F (25°C)	Isopropyl Ether	A	70°F (21°C)	Propylene Glycol	A	70°F (21°C)
Acrylic Acid	NR		Dichloroethane	A	70°F (21°C)	Jet Fuel, JP1, JP2	A	70°F (21°C)	Propylene Oxide	A	70°F (21°C)
Acrylonitrile	A	70°F (21°C)	Dichlorophenol	A	70°F (21°C)	Kerosene	A	70°F (21°C)	Pyridine	A	70°F (21°C)
Alcohols, General	B	70°F (21°C)	Diethanolamine	NR		Laquer Solvents	A	70°F (21°C)	SAL Ammoniac (Ammonium Chloride)	NR	
Alkalies, General	C	70°F (21°C)	Diethylamine	A	70°F (21°C)	Latex	NR		Salt, 20%	B	90°F (32°C)
Aluminum Chloride	NR		Diethyl Ether	A	70°F (21°C)	Ligroin	A	70°F (21°C)	Sea Water	A	70°F (21°C)
Aluminum Potassium Sulfate	A	70°F (21°C)	Diethylene Glycol	A	70°F (21°C)	Lime + Water	NR		Sodium Acid Sulfate	NR	
Aluminum Sulfate	NR		Dimethyl Ether	A	70°F (21°C)	Lubricating Oil, ASTM 1	A	70°F (21°C)	Sodium Bicarbonate	N R	
Ammonia Liquors, 1.8%	A	70°F (21°C)	Dimethyl Formamide	A	70°F (21°C)	Lubricating Oil, ASTM 2	A	70°F (21°C)	Sodium Bisulfate	NR	
Ammonium Chloride	NR		Diocylt Phthalate	A	70°F (21°C)	Lubricating Oil, ASTM 3	A	70°F (21°C)	Sodium Carbonate	B	194°F (90°C)
Ammonium Hydroxide, 1.8%	A	70°F (21°C)	Dioxane	A	70°F (21°C)	Lubricating Oil, SAE	A	70°F (21°C)	Sodium Chloride, 20%	B	90°F (32°C)
Ammonium Nitrate	NR		Epichlorohydrin	A	70°F (21°C)	Lubricating Oil, Lubricants General	A	70°F (21°C)	Sodium Hydroxide, 0.5%	A	70°F (21°C)
Ammonium Phosphate	NR		Ethanolamine	NR		Lye, 0.5%	A	70°F (21°C)	Sodium Hypochlorite, 0.5%	A	70°F (21°C)
Ammonium Sulfate	B	70°F (21°C)	Ether	A	70°F (21°C)	Magnesium Chloride	NR		Sodium Metaphosphate	NR	
Amyl Acetate	A	70°F (21°C)	Ethyl Acetate	A	70°F (21°C)	Magnesium Hydroxide	NR		Sodium Nitrate, 0.45%	B	203°F (95°C)
Amyl Alcohol	A	70°F (21°C)	Ethyl Acrylate	A	70°F (21°C)	Melamine Resins, Trizane	A	70°F (21°C)	Sodium Perborate, 0.064%	B	203°F (95°C)
Amyl Phenol	A	70°F (21°C)	Ethyl Alcohol	A	70°F (21°C)	Mercuric Chloride	NR		Sodium Phosphate	NR	
Aqua Regia	NR		Ethyl Benzene	A	70°F (21°C)	Mesityl Oxide	A	70°F (21°C)	Sodium Phosphate, Tribasic, 0.5%	A	150°F (66°C)
Aroclor, Chlorinated Polyphenol	A	70°F (21°C)	Ethyl Bromide	A	70°F (21°C)	Methacrylic Acid	NR		Sodium Sulfate (soda Cake), 0.12%	A	203°F (95°C)
ASTM Oil	A	70°F (21°C)	Ethyl Ether	A	70°F (21°C)	Methyl Acetone	A	70°F (21°C)	Sodium Tripolyphosphate	NR	
Benzene	B	70°F (21°C)	Ethyl Silicate, condensed	A	70°F (21°C)	Methyl Benzene (Toluene)	A	70°F (21°C)	Soils, Alkaline	B	
Benzine (Gasoline)	A	70°F (21°C)	Ethyl Sulfate	A	70°F (21°C)	Methyl Cellulosive	A	70°F (21°C)	Stoddards Solvent	A	70°F (21°C)
Bleach	NR		Ethylene Chloride	A	70°F (21°C)	Methyl Chloroform	A	70°F (21°C)	Styrene	A	70°F (21°C)
Bleaching Powders	NR		Ethylene Chlorohydrin	A	70°F (21°C)	Methyl Ether	A	70°F (21°C)	Sulfanated Oils	C	70°F (21°C)
Boric Acid	NR		Ethylene Diamine	NR		Methyl Ethyl Ketone	A	70°F (21°C)	Sulfuric Acid, Aerated	NR	
Bromine Water	NR		Ethylene Dichloride	A	70°F (21°C)	Methyl Isobutyl Ketone	A	70°F (21°C)	Sulfuric Acid, Air Free	NR	
Butyl Acetate	A	70°F (21°C)	Ethylene Glycol	A	75°F (24°C)	Methyl Isopropyl Ketone	A	70°F (21°C)	Sulfurous Acid	NR	
Butyl Alcohol (Butanol)	A	70°F (21°C)	Ethylene Oxide	A	70°F (21°C)	Mineral Spirit	A	70°F (21°C)	Tannic Acid	NR	
Butyl Amine	A	70°F (21°C)	Ferric Chloride	NR		Naphtha	A	70°F (21°C)	Tetrachloroethylene	A	70°F (21°C)
Butyl Cellulosive	A	70°F (21°C)	Food Fluids, Juices and Pastes	NR		Nitrating Acids	NR		Tetrahydrofuran	NR	
n-Butyl Chloride	A	70°F (21°C)	Formaldehyde	A	70°F (21°C)	Nitric + Hydrochloric Acids	NR		Toluene	A	70°F (21°C)
Butyl Ether	A	70°F (21°C)	Formic Acid, 2.5%	A	70°F (21°C)	Nitrous Acid	NR		Trichloroethane	A	70°F (21°C)
Butyl Phenol	A	70°F (21°C)	Fruit Juices	NR		Oil, Mineral	B	70°F (21°C)	Trichloropropane	A	70°F (21°C)
Butyl Phthalate	A	70°F (21°C)	Fuel Oil, 1,2,3,5A,5B and 6	A	70°F (21°C)	Paraffin	B	70°F (21°C)	Triethylamine	A	70°F (21°C)
Butyric Acid	NR		Gasoline, General	A	70°F (21°C)	Perchloroethylene	A	70°F (21°C)	Triethylene Glycol	A	70°F (21°C)
Calcium Chlorate, 1.5%	B	70°F (21°C)	Glaubers Salt, 0.12%	A	203°F (95°C)	Petroleum	A	70°F (21°C)	Trisodium Phosphate, 0.5%	A	150°F (66°C)
Calcium Chloride, 20%	A	95°F (35°C)	Glycerin	A	70°F (21°C)	Petroleum Ether	A	70°F (21°C)	Turpentine	C	70°F (21°C)
Calcium Hydroxide	NR		Grease	A	70°F (21°C)	Phenol (Carbolic Acid)	A	70°F (21°C)	Vinyl Acetate	A	70°F (21°C)
Calcium Hypochlorite	NR		Grease, Petro Base	A	70°F (21°C)	Phosphoric Acid	NR		Water, Acid Mine	C	70°F (21°C)
Calcium Sulfate	A	66°F (19°C)	Gypsum	A	66°F (19°C)	Pickling Solution, Alum	NR		Water, Distilled	NR	
Caliche Liquors	NR		Hexamine	A	70°F (21°C)	Polyvinyl Acetate	NR		Water, Fresh Tap	B	70°F (21°C)
Carbitol	A	70°F (21°C)	Hexanol, Tertiary	A	70°F (21°C)	Potassium Carbonate	C	70°F (21°C)	Water, River or Lake	A	70°F (21°C)
Carbolic Acid	A	70°F (21°C)	Hexylene Glycol	A	70°F (21°C)	Potassium Chloride, 1.8%	C	70°F (21°C)	Water, Sea	A	70°F (21°C)
Carbon Tetrachloride	A	140°F (60°C)	Hydraulic Fluids	A	70°F (21°C)	Potassium Hydrate	NR		Xylene	A	70°F (21°C)
Cellulosive	A	70°F (21°C)	Hydrochloric Acid	NR		Potassium Hydroxide	NR		Zinc Chloride	NR	
Cellulosive Acetate	B	70°F (21°C)	Hydrofluoric Acid	NR		Potassium Nitrate	NR				
Chlorinated Water	NR		Isobutyl Acetate	A	70°F (21°C)	Potassium Sulfate	NR				
Citric Acid	NR		Isobutyl Alcohol	A	70°F (21°C)	Propionic Acid	A	70°F (21°C)			