Corrosion Resistance Guide

1. Highly corrosion resistant
2. Partially corrosion resistant
3. Not corrosion resistant

Substance	Concentration	Temp. °F	AS	SS	NS	TI	PC	PC-SY
Acetic Acid	10%	68	1	1	1	1	1	1
Acetone		68	1	1	1	1	1	3
Alcohol			1	1	1	1	1	1
Aluminum Sulfate	Saturation	68	3	1	1	1	—	—
Ammonia Water		68	1	1	1	1	1	1
Ammonium Chloride	50%	Boiling	3	2	1	1	—	—
Ammonium Nitrate		Boiling	1	1	1	1	2	1
Ammonium Sulfate	Saturation	Boiling	2	1	1	1	—	—
Beer		68	1	1	1	1	1	1
Benzene		68	1	1	1	1	1	1
Boric Acid	50%	Boiling	1	1	1	1	—	—
Butyric Acid		68	1	1	1	1	1	—
Calcium Chloride	Saturation	68	3	2	1	1	2	1
Calcium Hydroxide	20%	Boiling	1	1	1	1	1	1
Calcium Hypochlorite	11-14%	68	3	1	1	1	3	1
Carbolic Acid			1	1	1	1	3	1
Carbon Tetrachlorite (dry)		68	1	1	1	1	1	1
Chlorinated Water			3	3	1	1	3	—
Chlorine Gas (dry)		68	3	2	2	1	—	1
Chlorine Gas (moist)		68	3	3	2	1	—	1
Chromic Acid	5%	68	2	1	1	1	3	1
Citric Acid	50%	68	1	1	1	1	—	1
Coffee		Boiling	1	1	1	1	1	1
Creosote		68	1	1	1	1	—	—
Developing Solution		68	2	1	1	1	1	1
Ethyl Ether		68	1	1	1	1	1	1
Ferric Acid	50%	68	1	1	1	1	3	1
Ferric Chloride	5%	68	3	2	2	1	—	—
Formalin	40%	68	1	1	1	1	—	—
Formic Acid	50%	68	1	1	1	1	3	1
Fruit Juice		68	2	1	1	1	1	1
Gasoline		68	1	1	1	1	1	1
Glycerol		68	1	1	1	1	1	1
Honey			1	1	1	1	1	1
Hydrochloric Acid	2%	68	3	3	3	1	3	1
Hydrogen Peroxide	30%	68	2	1	1	1	3	1
Hydrogen Sulfide (dry)			1	1	1	1	1	1
Hydrogen Sulfide (wet)			3	3	3	1	3	—
Hydroxybenzene		68	1	1	1	1	3	—
Kerosene		68	1	1	1	1	—	—
Ketchup		68	1	1	1	1	1	1
Lactic Acid	10%	68	2	1	1	1	1	1
Lard			1	1	1	1	—	—
Linseed Oil	100%	68	2	1	1	1	1	—
Malic Acid	50%	Boiling	1	1	1	1	1	1
Mayonnaise		68	2	1	1	1	1	1
Milk		68	1	1	1	1	1	1

Substance	Concentration	Temp. °F	AS	SS	NS	TI	PC	PC-SY
Nitric Acid	5%	68	2	1	1	1	3	1
Nitric Acid	65%	68	3	1	1	1	3	1
Nitric Acid	65%	Boiling	3	2	2	1	3	3
Oil (Plant, Mineral)		68	1	1	1	1	1	1
Oleic Acid		68	1	1	1	1	1	—
Oxalic Acid	10%	68	2	1	1	1	—	1
Paraffin		68	1	1	1	1	1	—
Petroleum		68	1	1	1	1	1	1
Phosphate			1	1	1	1	—	—
Phosphoric Acid	5%	68	2	1	1	1	3	1
Phosphoric Acid	10%	68	2	2	2	1	3	1
Picric Acid	Saturation	68	1	1	1	1	—	—
Potassium	Saturation	68	2	1	1	1	—	—
Potassium Bichromate	10%	68	1	1	1	1	1	—
Potassium Chloride	Saturation	68	2	1	1	1	—	—
Potassium Hydroxide	20%	68	1	1	1	1	1	1
Potassium Nitrate	25%	68	1	1	1	1	1	—
Potassium Nitrate	25%	Boiling	3	1	1	1	—	—
Potassium Permanganate	Saturation	68	1	1	1	1	—	1
Sal Ammoniac	50%	Boiling	3	2	1	1	—	—
Sea-Water		68	3	2	1	1	2	1
Soap-and-Water-Solution		68	1	1	1	1	1	—
Sodium Carbonate	Saturation	Boiling	1	1	1	1	—	—
Sodium Chloride	5%	68	2	1	1	1	1	1
Sodium Cyanide		68	—	1	1	1	—	—
Sodium Hydrocarbonate		68	1	1	1	1	1	1
Sodium Hydroxide	25%	68	1	1	1	1	1	—
Sodium Hypochlorite	10%	68	3	3	1	1	3	1
Sodium Perchlorate	10%	Boiling	3	1	1	1	—	—
Sodium Sulfate	Saturation	68	1	1	1	1	—	—
Sodium Thiosulfate	25%	Boiling	1	1	1	1	—	—
Soft Drink		68	1	1	1	1	1	1
Stearic Acid	100%	Boiling	3	3	1	1	3	—
Sugar Solution		68	1	1	1	1	1	1
Sulfuric Acid	5%	68	3	3	1	1	3	1
Sulfur Dioxide		68	3	1	1	1	—	—
Synthetic Detergent			1	1	1	1	1	1
Syrup			1	1	1	1	1	1
Tartaric Acid	10%	68	1	1	1	1	1	1
Turpentine		95	1	1	1	1	—	1
Varnish			1	1	1	1	—	1
Vegetable Juice		68	1	1	1	1	1	1
Vinegar		68	3	2	1	1	2	1
Water			1	1	1	1	1	1
Whiskey		68	1	1	1	1	1	1
Wine		68	1	1	1	1	1	1
Zinc Chloride	50%	68	3	2	2	1	2	1
Zinc Sulfate	25%	68	1	1	1	1	—	1

Key: AS: 600 AS Series SS: 304 SS Series NS: 316 NS Series TI: Titanium TI Series PC: Poly-Steel Chain PC-SY: Poly-Steel Anti-Chemical Series

Note: For information on the corrosion resistance of LS Series Chain, please consult U.S. Tsubaki Engineering.