

# ACO Stainless Steel Resistance Table



The corrosion resistance information below is indicative only.

All data is based on reactions noted at an ambient temperature of 20°C.

Higher temperatures tend to reduce the corrosion resistance of materials.

Test samples should be used for final determination of chemical resistance.

Contact ACO for more information.

Typical factors that affect material selection:

- type(s) of chemical(s) and % composition in the liquid
- concentration percentages
- contact time with trough system
- temperatures of liquid flowing into the trough
- flushing system employed to clear liquids from the system
- type of cleaning agent (see Care & Maintenance)
- grate, locking mechanism and trash basket materials
- sealant for compatibility, if applicable

Reagent	304	316L
Acetic Acid 20%	✓	✓
Acetic Acid 80%	✓	✓
Acetone	✓	✓
Alcohol (Methyl or Ethyl)	✓	✓
Aluminium Chloride	?	?
Aluminium Sulphate	✓	✓
Ammonia Gas (Dry)	✓	✓
Ammonium Chloride	?	?
Ammonium Hydroxide	✓	✓
Ammonium Nitrate	✓	✓
Ammonium Phosphate	✓	✓
Ammonium Sulphate	?	✓
Ammonium Sulphide	✓	✓
Amyl Chloride	✓	✓
Aniline	✓	✓
Barium Chloride	✓	✓
Barium Hydroxide 10%	~	~
Barium Sulphate	✓	✓
Barium Sulphide	~	~
Beer	✓	✓
Beet Sugar Liquors	✓	✓
Benzene	✓	✓
Benzoic Acid	✓	✓
Bleach -12.5%Active Cl	~	~
Boric Acid	✓	✓
Bromic Acid	?	?
Bromine Water	x	x
Butane	✓	✓
Calcium Carbonate	✓	✓
Calcium Chloride	x	?
Calcium Hydroxide	?	✓
Calcium Hypochlorite	x	?
Calcium Sulphate	✓	✓
Cane Sugar Liquors	~	~
Carbon Acid	~	~
Carbon Bisulphide	✓	✓
Carbon Dioxide	✓	✓
Carbon Monoxide	✓	✓
Carbon Tetrachloride	?	?
Caustic Potash	✓	✓
Caustic Soda	✓	✓
Chloride (Dry)	?	?
Chloride (Wet)	x	x
Chloroacetic Acid	~	✓
Chlorobenzene	✓	✓
Chloroform	?	?
Chrome Acid 50%	x	x
Chromic Acid 10%	✓	✓
Citric Acid	?	✓
Copper Chloride	x	x
Copper Cyanide	✓	✓
Copper Nitrate	✓	✓
Copper Sulphate	✓	✓
Cottonseed Oil	~	~
Cresol	~	~
Cyclohexanone	?	✓
Cyclohexanol	~	~

Reagent	304	316L
Dimethyleanine	~	~
Dionylphalate	~	~
Disodium Phosphate	~	~
Distilled Water	✓	✓
Ethyl Acetate	✓	✓
Ethylene Chloride	✓	✓
Ethylene Glycol	✓	✓
Fatty Acids (Cb)	✓	✓
Ferric Sulphate	✓	✓
Fluorene Gas (Wet)	x	x
Formaldehyde (37%)	✓	✓
Formic Acid (90%)	x	✓
Freon 12	✓	✓
Fruit Juices and Pulp	?	✓
Furfural	✓	✓
Gasoline (Refined)	✓	✓
Glucose	✓	✓
Glycerine	✓	✓
Hydrobromic Acid (20%)	x	x
Hydrochloric Acid (40%)	x	x
Hydrocyanic Acid	✓	✓
Hydrogen Peroxide (90%)	✓	✓
Hydroquinone	~	~
Hypochlorous Acid	~	~
Iodine	x	?
Kerosene	✓	✓
Lactic Acid 25%	✓	✓
Linseed Oil	✓	✓
Liqueurs	~	~
Magnesium Chloride	?	?
Magnesium Sulphate	✓	✓
Maleic Acid	?	?
Methyl Chloride	?	?
Methyl Ethyl Ketone	~	~
Milk	✓	✓
Minerals Oils	~	~
Muriatic Acid	x	x
Nickel Chloride	?	?
Nickel Sulphate	✓	✓
Oils and Fats	✓	✓
Oleic Acid	✓	✓
Oleum	~	~
Oxalic Acid	?	?
Palmitic Acid 10%	~	~
Perchloric Acid 10%	x	x
Perchloric Acid 70%	x	x
Petroleum Oils (Sour)	✓	✓
Phenol 5%	✓	✓
Phosphorous Trichloride	✓	✓
Photographic Solutions	?	?
Picric Acid	✓	✓
Plating Solutions	✓	✓
Potassium Carbonate	✓	✓
Potassium Chloride	✓	✓
Potassium Cyanide	✓	✓
Potassium Dichromate	✓	✓
Potassium Hydroxide	✓	✓

Reagent	304	316L
Potassium Permanganate	✓	✓
Potassium Sulphate	✓	✓
Propane Gas	~	~
Propyl Alcohol	~	~
Sea Water	x	?
Sewage	?	?
Silver Nitrate	✓	✓
Silver Sulphate	✓	✓
Sodium Bicarbonate	✓	✓
Sodium Bisulphite	✓	✓
Sodium Carbonate	✓	✓
Sodium Cyanide	✓	✓
Sodium Ferrocyanide	~	~
Sodium Hydroxide	✓	✓
Sodium Hypochlorite	?	✓
Sodium Sulphate	✓	✓
Sodium Sulphide	?	✓
Sodium Sulphite	?	✓
Sodium Thiosulphate	✓	✓
Stannous Chloride	?	?
Stearic Acid	✓	✓
Sulphite Liquor	~	~
Sulphurous Acid	?	?
Sulphur	?	✓
Sulphur Dioxide (Dry)	?	✓
Sulphur Dioxide (Wet)	?	✓
Sulphuric Acid 50%	x	x
Sulphuric Acid 70%	x	x
Sulphuric Acid 93%	x	x
Tannic Acid	✓	✓
Tanning Liquors	✓	✓
Tartaric Acid	~	~
Toluene	~	~
Trichloroethylene	✓	✓
Triethanolamine	~	~
Trisodium Phosphate	~	~
Turpentine	✓	✓
Urea	✓	✓
Urine	✓	✓
Vinegar	✓	✓
Water (Fresh)	✓	✓
Water (Mine)	✓	✓
Water (Salt)	?	?
Whiskey	✓	✓
Wines	✓	✓
Xylene	~	~
Zinc Chloride	x	x
Zinc Sulphate	?	✓

✓	Recommended
?	Suitable, contact ACO for further advice
x	Not recommended
~	No data available