

## Chemical Resistance

The resistance information contained within this table is indicative only and is based on reactions noted at an ambient temperature of 20°C. Higher temperatures will generally reduce the corrosion resistance of the materials.

If guarantees are required of specific material suitability, please contact ACO for further information.

### Legend

- ✓ Recommended
- ? Suitable, however contact ACO Stainless for further advice
- ✗ Not recommended
- No data available

Reagent	Stainless Steel		Seal		Reagent	Stainless Steel		Seal		Reagent	Stainless Steel		Seal	
	304	316	EPDM	Viton		304	316	EPDM	Viton		304	316	EPDM	Viton
Acetic Acid 20%	✓	✓	✓	✓	Diethylamine	✓	✓	?	✓	Potassium Dichromate	✓	✓	✓	✓
Acetic Acid 80%	✗	✓	✓	✓	Dimethylaniline	✓	✓	?	✗	Potassium Hydroxide	✓	✓	✓	✓
Acetone	✓	✓	✓	✓	Disodium Phosphate	-	-	✓	✓	Potassium Permanganate	✓	✓	✓	✓
Alcohol (Methyl or Ethyl)	✓	✓	✓	?	Distilled Water	✓	✓	✓	✓	Potassium Sulphate	✓	✓	✓	✓
Aluminium Chloride	?	?	✓	✓	Ethyl Acetate	✓	✓	?	✗	Propane Gas	✓	✓	-	✓
Aluminium Sulphate	✓	✓	-	-	Ethylene Chloride	✓	✓	✗	?	Propyl Alcohol	✓	✓	✓	✓
Ammonia Gas (dry)	✓	✓	-	-	Ethylene Glycol	✓	✓	✓	✓	Sea Water (Natural)	✗	?	✓	✓
Ammonium Chloride	?	?	✓	✓	Fatty Acids (Cb)	✓	✓	✗	✓	Silver Nitrate	✓	✓	✓	✓
Ammonium Hydroxide	✓	✓	✓	✓	Ferric Sulphate	✓	✓	✓	✓	Silver Sulphate	✓	✓	✓	✓
Ammonium Nitrate	✓	✓	✓	✓	Fluorene Gas (Wet)	✗	✗	✓	?	Sodium Bicarbonate	✓	✓	✓	✓
Ammonium Phosphate	?	✗	✓	✓	Formaldehyde 47%	✓	✓	✓	✓	Sodium Bisulphite	✓	✓	✓	✓
Ammonium Sulphate	?	✓	✓	✓	Formic Acid 90%	✗	✓	✓	?	Sodium Carbonate	✓	✓	✓	✓
Ammonium Sulphide	✓	✓	-	-	Freon 12	✓	✓	✓	✓	Sodium Cyanide	✓	✓	✓	✓
Amyl Chloride	✓	✓	✗	?	Fruit Juices & pulp	?	✓	-	✓	Sodium Ferrocyanide	✓	✓	✓	✓
Aniline	✓	✓	?	✓	Furfural	✓	✓	✗	✗	Sodium Hydroxide	See Caustic Soda		✓	✓
Barium Chloride	✓	✓	✓	✓	Gasoline (Refined)	✓	✓	✗	✓	Sodium Hypochlorite	?	?	?	✓
Barium Hydroxide 10%	-	-	✓	✓	Glucose	✓	✓	✓	✓	Sodium Sulphate	✓	✓	✓	✓
Barium Sulphate	✓	✓	✓	✓	Glycerine	✓	✓	✓	✓	Sodium Sulphide	?	✗	✓	✓
Barium Sulphide	-	-	✓	✓	Hydrobromic Acid 20%	✗	✗	✓	✓	Sodium Sulphite	?	✓	✓	✓
Beer	✓	✓	✓	✓	Hydrochloric Acid 40%	✗	✗	✗	✓	Sodium Thiosulphate	✓	✓	✓	✓
Beet Sugar Liquors	✓	✓	✓	✓	Hydrocyanic Acid	✓	✓	?	✓	Stannous Chloride	✗	✓	✗	✓
Benzene	✓	✓	✗	✓	Hydrogen Peroxide 90%	✓	✓	✗	✓	Stearic Acid	✓	✓	?	✓
Benzoic Acid	✓	✓	✗	✓	Hydroquinone	✓	✓	✗	✓	Sulphurous Acid	?	✓	?	✓
Bleach 12.5% active Cl	-	-	✓	✓	Hypochlorous Acid	✗	✗	✗	✓	Sulphur	?	✓	-	✓
Boric Acid	?	?	-	-	Iodine	✗	✗	?	✓	Sulphur Dioxide (Dry)	✗	✓	✓	✓
Bromic Acid	?	?	-	-	Kerosene	✓	✓	✗	✓	Sulphur Dioxide (Wet)	-	✓	✓	✓
Bromine	✗	✗	-	-	Lactic Acid 25%	✓	✓	✓	✓	Sulphuric Acid 50%	✗	✗	?	✓
Butane	✓	✓	✗	✓	Linseed Oil	✓	✓	✗	✓	Sulphuric Acid 70%	✗	✗	?	✓
Calcium Carbonate	✓	✓	✓	✓	Magnesium Chloride	✗	✗	✓	✓	Sulphuric Acid 94%	✗	✗	?	✓
Calcium Chloride	✗	?	✓	✓	Magnesium Sulphate	✓	✓	✓	✓	Tannic Acid	✓	✓	✓	✓
Calcium Hydroxide	?	✓	✓	✓	Maleic Acid	✓	✓	✗	✓	Tanning Liquors	✓	✓	✓	✓
Calcium Hypochlorite	✗	?	?	✓	Methyl Chloride	✓	✓	✗	✓	Tartaric Acid	✗	?	?	✓
Calcium Sulphate	✓	✓	✓	✓	Methyl Ethyl Ketone	✓	✓	✓	✗	Toluene	✓	✓	✗	✗
Cane Sugar Liquors	-	-	✓	✓	Milk	✓	✓	✓	✓	Trichloroethylene	✓	✓	✗	✓
Carbonic Acid	✓	✓	✓	✓	Mineral Oils	-	-	✗	✓	Triethylamine	✓	✓	✓	✗
Carbon Bisulphide	✓	✓	✗	✓	Nickel Chloride	✗	✗	✓	✓	Trisodium Phosphate	✓	✓	✓	✓
Carbon Dioxide	✓	✓	✓	✓	Nickel Sulphate	✓	✓	✓	✓	Turpentine	✓	✓	✗	✓
Carbon Monoxide	✓	✓	✓	✓	Oils and Fats	✓	✓	?	✓	Urea	✓	✓	✓	✓
Carbon Tetrachloride	✓	✓	✗	✓	Oleic Acid	✓	✓	✓	✓	Urine	✓	✓	✓	✓
Caustic Potash	✓	✓	✓	✓	Oleum	✓	✓	✓	✓	Vinegar	✓	✓	✓	✓
Caustic Soda 20%	✓	✓	✓	✓	Oxalic Acid	✓	✓	✓	✓	Water (Fresh)	✓	✓	✓	✓
Caustic Soda 50%	✓	✓	✓	✓	Palmitic Acid 10%	✓	✓	✓	✓	Water (Mine - acid)	✓	✓	✓	✓
Caustic Soda 80%	✗	✓	?	?	Perchloric Acid 10%	✗	✗	?	✓	Water (Salt)	✓	✓	✓	✓
Chlorine (Dry)	?	?	✓	✓	Perchloric Acid 70%	✗	✗	?	✓	Whisky	✓	✓	✓	✓
Chlorine (Wet)	✗	✗	✗	✓	Petroleum Oils	✓	✓	✗	✓	Wines	✓	✓	✓	✓
Chloroacetic Acid	?	?	?	✗	Phenol 5%	✓	✓	?	✓	Xylene	✓	✓	✗	✓
Chlorobenzene	✓	✓	✗	✓	Phosphorous Trichloride	✓	✓	✓	✓	Zinc Chloride	?	?	✓	✓
Chloroform	?	?	✗	✓	Photographic Solutions	✗	✗	✓	✓	Zinc Sulphate	✓	✓	✓	✓
Chromic Acid 50%	✗	✗	?	✓	Picric Acid	✓	✓	✓	✓					
Chromic Acid 10%	✓	✓	✗	?	Potassium Carbonate	✓	✓	✓	✓					
Citric Acid	?	✓	✓	✓	Potassium Chloride	✓	✓	✓	✓					
Copper Chloride	✗	✗	✓	✓	Potassium Cyanide	✓	✓	✓	✓					
Copper Cyanide	✓	✓	✓	✓										
Copper Nitrate	✓	✓	-	✓										
Copper Sulphate	✓	✓	✓	✓										
Cottonseed Oil	✓	✓	✗	✓										
Cresol	✓	✓	✗	✓										
Cyclohexanone	✓	✓	?	✓										
Cyclohexane	✓	✓	✗	✓										
Cyclohexanone	✓	✓	?	✗										