



UNION CHAIN DIVISION - ENGINEERING INFORMATION - ROLLER CONVEYOR CHAINS

Corrosion Resistance Guide

Determine the corrosion-resistant properties of materials using this information as a guide. When making final specifications of chain, be sure to consider all operating conditions.

If you have any questions, contact Union Engineering. This table shows properties of materials at 68°F unless otherwise noted.

Fluid	Steel	300 Stainless Steel	400 Stainless Steel	600 Stainless Steel	UHMW	Delrin or EPC78 STP
Acetic Acid (5%)	N	R	R	L	R	N
Acetic Acid (10%)	N	R	R	*	R	R
Acetone	N	R	R	N	R	R
Alcohol	R	R	R	R	R	R
Ammonia Water	L	R	R	*	*	R
Aqueous Ammonia	L	R	R	R	R	R
Beer	L	R	R	R	R	R
Benzene	R	R	R	R	L	R
Boric Acid (5%)	N	R	R	*	*	*
Butyric Acid	*	R	R	*	*	R
Calcium Hydroxide (20% Boiling Point)	*	R	R	*	*	R
Calcium Hypochlorite	N	R	N	*	*	N
Caustic Soda (25%)	N	R	R	R	R	R
Carbolic Acid	*	R	R	*	*	N
Carbon Tetrachloride	L	L	L	L	L	R
Carbonated Water	N	R	R	R	R	R
Chlorine Gas (wet)	N	N	N	N	*	*
Citric Acid	N	R	L	L	R	L
Formaldehyde	R	R	R	R	*	R
Formic Acid	N	R	R	N	R	N
Formic Acid Aldehyde	R	R	R	R	R	R
Fruit Juice	N	R	L	L	R	R
Gasoline	R	R	R	R	L	R
Glycerin	R	R	R	*	*	R
Hydrochloric Acid (2%)	N	N	N	N	N	N
Hydrogen Peroxide (30%)	N	R	L	L	R	N
Hypochlorite Soda	N	N	N	N	R	N
Iodine	N	N	N	N	N	N
Kerosene	R	R	R	R	R	L
Lactic Acid	N	R	L	L	R	R
Methyl-Ethyl-Propyl-Butyl Alcohol	R	R	R	R	*	R
Milk	L	R	R	R	R	R
Nitric Acid (5%)	N	R	R	L	L	N
Oils (Vegetable and Mineral)	R	R	R	R	R	R
Oxalic Acid	N	R	L	*	*	*
Paraffin	R	R	R	R	R	R
Petroleum	R	R	R	R	R	R
Phosphoric Acid	N	L	N	N	N	N
Potassium Permanganate	*	R	R	*	*	R
Sea Water	N	L	L	L	R	R
Soapy Water	L	R	R	R	R	R
Sodium Bicarbonate	*	R	R	*	*	R
Sodium Carbonate (saturation) Boiling Point	*	R	R	*	*	*
Sodium Chloride	N	R	L	L	R	R
Sodium Hypochlorite (10%)	N	N	N	N	*	N
Sodium Sulfate (saturation)	*	R	R	*	*	*
Soft Drinks	L	R	R	R	R	R
Sulfuric Acid	N	L	N	N	N	N
Vegetable Juice	L	R	R	R	R	R
Vinegar	N	L	N	N	R	L
Water	L	R	R	R	R	R
Whiskey	L	R	R	R	R	R
Wine	L	R	R	R	R	R

R = Resistant; L = Less resistant; N = Not resistant; * = Unavailable