Flexible Hose & Coupling

7. Corrosion Resistance Reference Table

RATING: A-Suitable (normal conditions)
B-Limited Service
C-Unsuitable

NOTES :1. Susceptible to intergranular corrosion. 2. May cause explosive reaction
3. Susceptible to stress corrosion cracking. 4. Susceptible to pitting type corrosion
5. Discolors 6. Concentration over 50% and /or temperature over 200F. refer to our Engineering Dept.

	CUPRO NICKEL 706	MONEL 400	INCONEL 625	321 STAINLESS	316 STAINLESS
Acetaldehyde	A	A	A	A	A
Acetanilide	B	B	B	B	B
Acetic Acid	B	B	A	B[1]	A[1]
Acetic Anhydride	B	B	A	B	B
Acetone	A	A	A	B	B
Acetophenone	A	A	A	B	B
Acetylene	C	A	A	A	A
Acrylates	B	B	B	B	B
Acrylic Acid	B	B	A	B	B
Acrylonitrile	A	A	A	A	A
Alcohols	A	A	A	A	A
Alum	B	B	A	B	B
Alumina	A	A	A	A	A
Aluminum Acetate	B	B	B	B	B
Aluminum Chloride (Dry)	B	A	A	A	A
Aluminum Chloride (Moist)	C	B	A	C[3,4]	C[3]
Aluminum Fluoride	B	B	C	C	C
Aluminum Hydroxide	A	B	B	B	B
Aluminum Sulfate	B	B	B	B[1,3]	A[3]
Ammonia - Dry	A	A	A	A	A
Ammonia - Moist	C	C	B	A	A
Ammonium Acetate	B	A	A	A	A
Ammonium Bromide	C	B	B	C[4]	C[4]
Ammonium Chloride - Dry	C	A	A	A	A
Ammonium Chloride - Moist	C	B	B	C[3,4]	C[3]
Ammonium Hydroxide	C	A	A	B	B
Ammonium Nitrate	C	C[2]	B	B[3]	B[3]
Ammonium Sulfate	C	B	C	C[1]	B
Amyl Acetate	A	A	A	A	A
Amyl Alcohol	A	A	A	A	A
Amyl Chloride - Dry	C	A	A	A	A
Amyl Chloride - Moist	C	B	C	C[3,4]	C[3]
Aniline	C	A	B	B	B
Aniline Dyes	C	A	B	B	B
Asphalt	A	A	A	A	A
Atmosphere - Industrial	A	A	A	B[4]	A[4]
Atmosphere - Marine	A	A	A	B[4]	B[4]
Atmosphere - Rural	A	A	A	A	A
Barium Carbonate	A	B	B	B	B
Barium Chloride - Dry	B	A	A	A	A
Barium Chloride - Moist	C	B	C	C[3,4]	C[3]
Barium Hydroxide	A	B	B	B	A
Barium Sulfate	B	B	B	B	B
Barium Sulfide	C	C	B	B	B
Beer	A	A	A	A	A
Beet Sugar Syrups	A	A	A	A	A
Benzaldehyde	A	B	B	B	B
Benzene (Benzol)	A	A	A	A	A

	CUPRO NICKEL 706	MONEL 400	INCONEL 625	321 STAINLESS	316 STAINLESS
Benzoic Acid	A	B	A	A	A
Benzylamine	C	B	B	B	B
Benzyl Chloride - Dry	A	A	A	A	A
Benzyl Chloride - Moist	B	B	B	C[3,4]	C[3]
Black Liquor, Sulfate Process	C	A	B	B	B
Bleaching Powder - Dry	A	A	A	A	A
Bleaching Powder - Moist	B	B	B	C[1,3,4]	C[3,4]
Borax	A	A	A	A	A
Bordeaux Mixture	A	A	A	A	A
Boric Acid	A	B	A	A	A
Boron Trichloride - Dry	B	B	B	B	B
Boron Trichloride - Moist	B	B	C	C[3,4]	C[3]
Boron Trifluoride - Dry	A	B	A	B	B
Brines	A	B	B	C[3,4]	C[3]
Bromic Acid	C	C	C	C	C
Bromine, Dry	A	A	A	B	B
Bromine, Moist	B	B	B	C	C
Butadiene	A	A	A	A	A
Butane	A	A	A	A	A
Butanol (Butyl Alcohol)	A	A	A	A	A
Butyl Phenols	B	A	B	B	B
Butylamine	B	A	A	A	A
Butyric Acid	A	B	A	B	B
Cadmium Chloride - Moist	B	B	B	C[3,4]	C[3]
Cadmium Chloride - Dry	A	A	A	A	A
Cadmium Sulfate	A	A	A	A	A
Calcium Bisulfite	B	B	B	B[1]	B
Calcium Bromide	A	B	A	C[3]	C[3]
Calcium Chloride - Moist	A	B	A	C[3,4]	C[3]
Calcium Chloride - Dry	A	A	A	A	A
Calcium Fluoride	B	B	B	C	C
Calcium Hydroxide	A	B	A	B	B
Calcium Hypochlorite - Moist	B	B	B	C[3,4]	C[3,4]
Calcium Hypochlorite - Dry	A	A	A	A	A
Calcium Nitrate	B	B	A	B[1]	B
Calcium Oxide	A	A	A	A	A
Cane Sugar Syrups	A	A	A	A	A
Carbolic Acid (Phenol)	B	B	B	B	B
Carbon Dioxide - Dry	A	A	A	A	A
Carbon Dioxide - Moist	B	A	A	A	A
Carbonated Beverages	B	A	A	A	A
Carbonated Water	B	A	A	A	A
Carbon Disulfide	B	B	B	B	B
Carbon Tetrachloride - Dry	A	A	A	A	A
Carbon Tetrachloride - Moist	B	B	B	C[3,4]	C[4]
Castor Oil	A	A	A	A	A
Chlorine - Dry	A	A	A	A	A
Chlorine - Moist	C	B	C	C[3,4]	C[3]

	CUPRO NICKEL 706	MONEL 400	INCONEL 625	321 STAINLESS	316 STAINLESS
Chloroacetic Acid	B	B	B	C[3,4]	C[3]
Chloric Acid	C	C	C	C[3]	C[3]
Chlorine Dioxide - Moist	C	B	B	C[3,4]	C[3]
Chlorine Dioxide - Dry	B	A	A	A	A
Chloroform - Dry	A	A	A	A	A
Chloroform - Moist	B	B	B	C[3,4]	C[3]
Chromic Acid	C	C	B	C[1,4]	C
Chromic Fluoride	C	B	B	C	C
Chromic Hydroxide	B	B	B	B	B
Chromium Sulfate	B	B	B	B	B
Cider	A	A	A	A	A
Citric Acid	A	B	A	B	B
Coffee	A	A	A	A	A
Copper Chloride - Dry	A	A	A	A	A
Copper Chloride - Moist	C	B	C	C[3,4]	C[3]
Copper Nitrate	C	C	B	A	A
Copper Sulfate	B	B	B	B[1]	B
Corn Oil	A	A	A	A	A
Cottonseed Oil	A	A	A	A	A
Creosote	A	A	A	A	A
Crude Oil	B	A	A	C[1]	B
Cyclohexane	B	B	B	B	B
DDT	B	B[4]	B	B	B
Dichloroethane - Dry	A	A	A	A	A
Dichloroethane - Wet	B	B	B	C[4]	C[4]
Dichloroethylene - Dry	A	A	A	A	A
Dichloroethylene - Moist	B	B	B	C[4]	C[4]
Dichlorophenol	B	B	B	B[3]	B[3]
Diisocyanate	A	A	A	A	A
Dimethyl Sulfate	B	B	A	B	B
Epichlorohydrin - Dry	A	A	A	A	A
Epichlorohydrin - Moist	B	B	B	C[3,4]	C[3]
Ethane	A	A	A	A	A
Ethers	A	A	A	A	A
Ethyl Acetate	A	B	A	B	B
Ethyl Alcohol	A	A	A	A	A
Ethyl Benzene	B	B	A	B[3]	B
Ethyl Chloride - Moist	B	B	B	C[3,4]	C[3]
Ethyl Chloride - Dry	A	A	A	A	A
Ethylene	A	A	A	A	A
Ethylene Chlorohydrin - Dry	A	A	A	A	A
Ethylene Chlorohydrin - Moist	B	B	B	C[4]	C[4]
Ethylene Diamine	B	B	A	B	B
Ethylene Glycol	A	A	A	A	A
Ethylene Oxide	C	B	B	B	B
Fatty Acids	B	B	B	B[1,4]	A
Ferric Chloride - Moist	C	B	B	C[1,3,4]	C[3,4]
Ferric Chloride - Dry	A	A	A	A	A
Ferric Nitrate	C	C	B	B	B
Ferric Sulfate	C	C	B	B[1]	A
Ferrous Chloride - Moist	C	B	B	C[3,4]	C[3]
Ferrous Chloride - Dry	A	A	A	A	A
Ferrous Sulfate	B	A	B	B[4]	B
Fluorine, Dry	A	A	A	A	A
Fluorine, Moist	C	B	C	C	C
Formaldehyde	A	A[5]	B	B	B
Formic Acid	A	B	A	B[1]	A
Freon	A	A	A	A	A
Fruit Juices	B	A	A	A	A
Fuel Oil	A	A	A	A	A
Furfural	A	A	B	A	A
Gasoline	A	A	A	A	A
Gelatine	A	A	A	A	A
Glucose	A	A	A	A	A
Glue	A	A	A	A	A
Glutamic Acid	B	B	A	B[3,4]	B[3,4]
Glycerin (Glycerol)	A	A	A	A	A
Heptane	A	A	A	A	A
Hexachloroethane - Dry	A	A	A	A	A
Hexachloroethane - Moist	B	B	B	C[4]	C[4]
Hydrazine	C	C	A	A	A
Hydrobromic Acid	C	C	B	C[4]	C
Hydrocarbons, Pure	A	A	A	A	A
Hydrochloric Acid	C	B	C	C[4]	C[4]
Hydrocyanic Acid	C	B	B	B[1]	B
Hydrofluoric Acid	C	B	B	C[1,3]	C
Hudrofluorsilicic Acid	B	B	B	C	C
Hydrogen	A	A	A	A	A
Hydrogen Chloride - Dry	A	A	A	A	A
Hydrogen Chloride - Wet	C	B	C	C[4]	C[4]
Hydrogen Peroxide	B	B	A	A	A
Hydrogen Sulfide - Dry	A	A	A	A	A
Hydrogen Sulfide - Moist	C	B	B	B[4]	A
Hydroquinone	B	B	B	B	B
Kerosine (Kerosene)	A	A	A	A	A
Lacquers	A	A	A	A	A
Lacquer Solvents	A	A	A	A	A
Lactic Acid	A	B	B	B[1,4]	B[1]
Lime	A	A	A	A	A
Lime - Sulfur	C	B	B	B	B
Linseed Oil	B	A	A	A	A
Lithium Chloride - Moist	C	B	B	C[3,4]	C[3]
Lithium Chloride - Dry	A	A	A	A	A
Lithium Hydroxide	B	B	B	B	B
Magnesium Chloride - Moist	B	B	B	C[3,4]	C[3]
Magnesium Chloride - Dry	A	A	A	A	A
Magnesium Hydroxide	A	A	A	A	A
Magnesium Sulfate	A	A	A	B	A
Maleic Acid	C	B	B	B[1]	B
Mercuric Chloride - Moist	C	B	A	C[3,4]	C[3]
Mercuric Chloride - Dry	C	A	A	A	A
Mercurous Nitrate	C	B[3]	B	B	B
Mercury	C	B[3]	B	B	B
Methyl Alcohol	A	A	A	A	A
Methane	A	A	A	A	A
Methyl Chloride - Dry	A	A	A	A	A
Methyl Chloride - Moist	B	B	B	C[3,4]	C[3]
Methyl Ethyl Ketone	A	B	A	B	B

	CUPRO NICKEL 706	MONEL 400	INCONEL 625	321 STAINLESS	316 STAINLESS
Milk	A	A	A	A	A
Mine Water	C	B	A	B	B
Naphthalene	B	B	A	A	A
Natural Gas	A	A	A	A	A
Nickel Chloride - Moist	B	B	B	C[3,4]	C[3]
Nickel Chloride - Dry	A	A	A	A	A
Nitric Acid	C	C	B	A	A
Nitrotoluene	B	B	B	B	B
Nitrogene	A	A	A	A	A
Oleic Acid	B	A	B	B[4]	B
Oleum (Fuming H2SO4)	C	C	B	B	B
Oxalic Acid	A	B	B	C[1]	B[1]
Oxygen	A	A	A	A	A
Palmitic Acid	B	A	A	A	A
Paraffin	A	A	A	A	A
Pentane	B	B	B	B	B
Phosphoric Acid	B	B	B	C[1]	B[1]
Phthalic Acid	B	B	B	B[1]	B
Picric Acid	C	C	B	B	B
Potassium Bromide	A	B	B	C	C
Potassium Carbonate	A	A	A	A	A
Potassium Chloride - Moist	B	B	B	C[3,4]	C[3]
Potassium Chloride - Dry	A	A	A	A	A
Potassium Chromate	A	B	A	B	B
Potassium Cyanide	C	B	B	B	B
Potassium Dichromate	C	A	A	A	A
Potassium Fluoride	C	B	B	C	C
Potassium Hydroxide	B	B[3]	A	B[3]	B[3]
Potassium Nitrate	A	B	A	B	A
Potassium Permanganate	B	B	B	B	B
Potassium Sulfate	A	B	A	B	B
Propane	A	A	A	A	A
Propylene	A	A	A	A	A
Propylene Dichloride - Dry	A	A	A	A	A
Propylene Dichloride - Moist	B	B	B	C[4]	C[4]
Pyridine	B	B	B	B	B
Pyrrolidine	B	B	A	B	A
Quinine	B	B	A	B	B
Rosin	A	A	A	A	A
Sea Water	A	B	A	C[3,4]	C[3]
Sewage	A	A	A	A	A
Silver Salts	C	A	A	B	B
Silver Nitrate	C	C	A	B	B
Soap Solutions	A	A	A	A	A
Sodium	A	A	A	A	A
Sodium Acetate	B	B	B	B[4]	B
Sodium Bicarbonate	A	A	A	A	A
Sodium Bisulfate	B	B	B	B[1,4]	B
Sodium Bisulfite	B	B[4]	B	B	B
Sodium Bromide	C	B	B	C	C
Sodium Carbonate	A	A	A	A	A
Sodium Chlorate - Moist	B	B	B	C[3,4]	C[3]
Sodium Chlorate - Dry	A	A	A	A	A
Sodium Chloride - Moist	A	B	A	C[3,4]	C[3]
Sodium Chloride - Dry	A	A	A	A	A
Sodium Chromate	B	B	B	B	B
Sodium Citrate	B	B	B	B	B

	CUPRO NICKEL 706	MONEL 400	INCONEL 625	321 STAINLESS	316 STAINLESS
Sodium Cyanide	C	B	B	B	B
Sodium Dichromate	C	B	B	B	B
Sodium Fluoride	B	B	B	C[4]	C
Sodium Hydroxide	B[3]	B[3]	A	B[3]	B[3]
Sodium Hypochlorite - Moist	C	B	B	C[1,4]	C[4]
Sodium Hypochlorite - Dry	A	A	A	A	A
Sodium Metasilicate	A	A	A	A	A
Sodium Nitrate	A	A	A	A	A
Sodium Nitrite	B	B	B	B	B
Sodium Peroxide	B	B	B	B	B
Sodium Phosphate	A	A	B	B	B
Sodium Silicate	A	A	A	A	A
Sodium Sulfate	A	A	A	B[3]	B
Sodium Sulfide	C	B	B	B[4]	B
Sodium Sulfite	B	B	B	B	B
Sodium Thiosulfate	C	B	B	B	B
Stannic Chloride - Moist	C	B	B	C[3,4]	C[3]
Stannic Chloride - Dry	A	A	A	A	A
Stannous Chloride - Moist	C	B	B	C[3,4]	C[3]
Stannous Chloride - Dry	A	A	A	A	A
Steam	A	A[3]	A	A	A
Stearic Acid	B	B	B	B	B
Strontium Nitrate	B	B	B	B	B
Sulfate Black Liquor	B	B	B	B	B
Sulfate Green Liquor	B	B	B	B[3]	B[3]
Sugar Solutions	A	A	A	A	A
Sulfur - Dry	B	A	A	A	A
Sulfur - Molten	C	B	A	A	A
Sulfur Chloride - Dry	A	A	A	A	A
Sulfur Chloride - Wet	B	B	B	C[3,4]	C[3]
Sulfur Dioxide - Dry	B	B	B	C[1]	B
Sulfur Dioxide - Moist	C	C	C	C[1]	B
Sulfur Trioxide - Dry	A	A	A	A	A
Sulfuric Acid, 95-100%	B	B	A	A	A
Sulfuric Acid, 80-95%	B	B	B	B	B
Sulfuric Acid, 40-80%	C	C	B	C[1]	C[1]
Sulfuric Acid, 40%	B	C	B	C[1]	C[1]
Sulfurous Acid	C	B	B	C[1,4]	C[1,4]
Tall Oil	B	B	B	B	B
Tannic Acid	B	B	B	B	B
Tar	A	A	A	A	A
Tartaric Acid	B	B	B	B	B
Tetraphosphoric Acid	C	C	B	B	B
Toluene	A	A	A	A	A
Trichloroacetic Acid	B	B	B	C[3,4]	C[4]
Trichloroethane - Dry	A	A	A	A	A
Trichloroethane - Moist	B	B	B	C[4]	C[4]
Trichloroethylene - Dry	A	A	A	A	A
Trichloroethylene - Moist	B	B	B	C[4]	C[4]
Turpentine	A	A	A	A	A
Varnish	A	A	A	A	A
Vinegar	B	B	B	B	B
Water, Potable	A	A	A	A	A
Xylene	A	A	A	A	A
Zinc Chloride - Moist	C	B	B	C[3,4]	C[3]
Zinc Chloride - Dry	A	A	A	A	A
Zinc Sulfate	B	B	B	B	A