

Corrosion Resistance of Coupling Materials

Chemical or Material Conveyed	Mall. from Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202 304, 308	Stainless 316	Monel
Sodium Phosphate – Alkaline		3				1	1	1	1
Sodium Phosphate – Neutral		2				1	1	1	1
Sodium Phosphate – Acid		2				X	2	1	1
Sodium Silicate	1	3		X		1	1	1	1
Sodium Sulfate	1	2		3		1	1	1	1
Sodium Sulfide	1	X				1	1	1	2
Sodium Thiosulfate (Hypo)	3	X		X		1	1	1	2
Stearic Acid	3	3		3		2	2	1	1
Sulfate Liquors		X				1	1	1	2
Sulfur	2	X		2		2	2	1	3
Sulfur Chloride	X	X				X	3	2	2
Sulfur Dioxide (Dry)	2	1		1		1	1	1	1
Sulfur Dioxide (Wet)		X				X	2	1	X
Sulfuric Acid — 10%	X	X	3	3		X	X	2	2
Sulfuric Acid — 10% – 75%	X	X	X	X		X	X	X	2
Sulfuric Acid — 75% – 95%	3	X	X	X		3	3	2	3
Sulfuric Acid — 95%	2	X	X			2	2	2	X
Sulfurous Acid	X	X		X		X	3	2	X
Tannic Acid	3	3	1	X		1	1	1	
Tar	1	2		1		2	1	1	1
Toluene, Toluol	1	1		1		1	1	1	1
Trichlorethylene	3	1		3		1	1	1	1
Turpentine		3		1		3	1	1	1
Varnish	2	2				1	1	1	1
Vegetable Oils	1	2		1		1	1	1	1
Vinegar	3	3		3		3	2	1	2
Water (Acid Mine Water)	3	X		3		2	1	1	3
Water (Fresh)	3	1		1		1	1	1	1
Water (Salt)	3	3	2	X		3	2	2	1
Whiskey	X	2				3	1	1	2
Wines	X	2				3	1	1	2
Xylene, Xylol	2	1		1		1	1	1	1
Zinc Chloride	X	X		X		3	2	1	1
Zinc Sulfate	3	3		3		3	2	1	1

KEY: 1 = Excellent 3 = Fair or Conditional
2 = Good X = Not Satisfactory

NOTE: No rating indicates
no data available.

(Reprinted from RMA Hose Handbook IP-2 Sixth Edition)