



# SAFETY AND TECHNICAL



WAH JOO SENG

## Corrosion Resistance of Coupling Material

### Ratings

#### Metal:

- E Excellent
- G Good
- F Fair
- X Not Recommended

#### Non-Metal:

- A Acceptable
- X Not Recommended

#### Gasket/Seal Material:

- T PTFE
- V FKM
- E E.P.D.M., E.P.R.
- N Neoprene
- B Buna N

#### Caution

The data below was compiled from various sources and serves as a general guideline and should not be solely relied upon without consulting and following the specific recommendation from the manufacturer.

#### Note:

Chemical compatibility shall varies greatly with temperature. The data given are based on 21°C. For temperatures other than 21°C. Contact Wah Joo Seng for further recommendations.

The gasket in the data are not listed in order of preference

Other variable such as wrong clamp and coupling, improper hose construction and gasket material shall contribute as factors that determine chemical resistance.

Media	Aluminum	Bronze	Hastelloy, C-276	Brass	Monel	Stainless Steel 316	Malleable Iron Carbon Steel	Nylon	Polypropylene	Seal Material
Acetic Acid (80%)	F	X	X	E	E	E	E	X	X	TEVNB
Acetic Acid (50%)	G	X	X	E	G	E	E	G	X	TEVNB
Acetic Acid (20%)	G	X	X	E	G	E	E	G	X	TEVNB
Acetic Acid (10%)	G	G	X	E	G	E	E	E	X	TEVNB
Acetate Solvents (Crude)	E	X	X	E	G	E	E	E	A	X T
Acetate Solvents (Pure)	E	E	E	E	E	E	E	E	A	X T
Acetone	E	G	G	E	E	E	E	E	A	X TE
Acetic Anhydride	G	G	X	E	G	E	G	X	X	TNB
Acetylene	E	X	X	G	G	G	E	E	X	TEVNB
Alcohol										
• Amyl Alcohol	G	G	G	G	E	G	G	G	A	A TEVNB
• Hexyl Alcohol	-	-	-	E	-	E	-	-	A	- -
• Isobutyl Alcohol	-	-	-	-	-	-	-	-	A	- -
• Isopropyl Alcohol	G	G	G	G	G	G	G	G	A	A TEVNB
• Benzyl Alcohol	G	G	G	G	E	G	E	E	X A	TVB
• Butyl Alcohol	E	E	G	G	E	G	E	E	A A	TEVN
• Diacetone Alcohol	E	G	E	E	E	E	G	G	X A	TE
• Ethyl Alcohol	E	G	G	E	G	E	G	G	X A	TEVNB
• Methyl Alcohol (Methanol)	G	G	G	E	G	E	G	G	A A	TENB
• Octyl Alcohol	-	-	-	-	-	-	-	-	A	- -
• Propyl Alcohol	G	G	G	E	G	E	E	E	X A	TEVNB
Aluminum										
• Aluminum Chloride (Aq.)	X	X	X	E	X	E	X	X	A A	TEVNB
• Aluminum Fluoride (Sat.)	G	-	-	-	G	-	G	X	A A	TEVNB
• Aluminum Nitrate (Sat.)	F	-	X	-	-	-	G	G	A A	TEVNB
• Aluminum Potassium Sulfate	G	G	G	G	G	G	G	X	X A	TEVNB
• Aluminum Sulfate (Sat.)	X	G	X	G	G	G	G	-	A A	TEVNB
Ammonia										
• Ammonia Anhydrous (not plated)	E	X	X	G	E	G	E	G	A X	TENB
• Ammonia Gas	X	X	X	E	X	E	E	E	A X	TENB



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Media	Aluminum	Bronze	Brass	Hastelloy, C-276	Monel	Malleable Iron	Stainless Steel 316	Nylon	Polypropylene	Seal Material	
• Ammonia Nitrate	-	-	-	-	-	-	-	X	-	-	
<b>Ammonium</b>											
• Ammonium Bifluoride	-	-	X	G	G	G	-	X	A	TEVB	
• Ammonium Hydroxide (Sat.)	G	X	X	G	X	G	G	A	A	TEVNB	
• Ammonium Nitrate	G	X	X	-	X	-	-	A	A	TENB	
• Ammonium Phosphate (10-40%)	X	X	X	-	G	-	G	A	A	TEVNB	
• Ammonium Sulfate (10-40%)	X	F	X	G	G	G	X	A	A	TEVNB	
• Ammonium Carbonate (Sat.)	G	X	X	G	G	G	G	A	A	TEVNB	
• Ammonium Casenate	-	-	-	-	-	-	-	A	-	-	
• Ammonium Chloride (Sat.)	X	G	X	G	G	G	X	A	A	TEVNB	
<b>Aniline</b>	-	G	X	G	G	G	E	E	X	TV	
<b>Arsenic Acid</b>	X	G	X	G	X	G	G	X	A	TEVNB	
<b>Asphalt</b>	-	-	-	-	-	-	G	-	X	TV	
<b>Barium</b>											
• Barium Chloride (Sat.)	-	G	G	E	G	E	-	X	A	TEVNB	
• Barium Hydroxide (Sat.)	X	X	G	G	E	G	G	A	A	TEVNB	
• Barium Carbonate (Sat.)	X	G	G	G	G	G	G	A	A	TEVNB	
• Barium Sulfate	G	G	G	-	G	-	G	A	A	TEVNB	
• Barium Sulfide	X	X	X	-	X	-	G	A	A	TEVNB	
<b>Beer</b>	E	G	G	E	E	E	E	A	A	TEVNB	
<b>Benzine</b>	-	-	-	-	-	-	-	A	X	-	
<b>Benzoic Acid</b>	G	G	G	-	G	-	G	X	X	TV	
<b>Black Liquor</b>	X	X	X	X	G	X	G	X	A	TEVNB	
<b>Benzaldehyde</b>	G	G	G	G	G	G	G	X	X	TE	
<b>Benzene, Benzol</b>	E	G	G	G	G	G	G	A	X	TV	
<b>Brine Acid</b>	-	G	G	E	-	E	-	-	X	A	TEVNB
<b>Bromic Acid</b>	X	X	X	-	X	-	-	A	A	TEVN	
<b>Bromine Liquid</b>	G	-	-	-	-	-	X	X	X	TV	
<b>Bleach (12.5% Active Chlorine)</b>	X	-	-	E	-	E	X	-	X	A	TEVN
<b>Borax</b>	X	G	G	E	E	E	E	X	A	TEVNB	
<b>Boric Acid</b>	E	G	X	E	G	E	-	-	X	A	TEVNB
<b>Butadiene, Butylene</b>	G	G	G	G	E	G	G	X	X	TVNB	
<b>Butane</b>	G	G	G	G	E	G	G	X	X	TV	
<b>Butyl Acetate</b>	E	G	G	G	G	G	G	A	X	T	
<b>Butyric Acid</b>	G	X	G	E	G	E	G	A	A	TV	
<b>Calcium</b>											
• Calcium Bromide	X	G	G	-	G	X	X	E	X	T	
• Calcium Carbonate	X	G	G	G	G	G	G	E	A	TEVB	
• Calcium Chloride (Sat.)	-	-	G	E	G	G	-	A	A	TEVNB	
• Calcium Hydroxide (Sat.)	X	X	G	-	G	G	G	A	A	TEVNB	
• Calcium Bisulfate	X	X	-	-	X	X	G	X	A	T	
• Calcium Bisulfide	-	-	-	-	G	-	G	-	A	TVB	
• Calcium Bisulfite	X	G	X	G	X	X	G	-	X	A	TVNB
• Calcium Hypochlorite (Sat.)	X	X	X	-	X	X	G	X	X	Q	TEV
<b>Carbon</b>											
• Carbon Dioxide (Wet)	E	-	X	G	-	F	G	G	X	A	TENB
• Carbon Disulfide	E	G	X	G	X	G	G	A	X	TV	
• Carbon Bisulfide	E	G	X	G	X	G	G	A	X	TV	
• Carbon Dioxide (Dry)	E	G	E	E	E	G	G	A	A	TENB	
• Carbon Monoxide	E	E	E	E	E	G	E	A	A	TEVNB	

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Media	Aluminum	Bronze	Brass	Hastelloy, C-276	Monel	Malleable Iron	Stainless Steel 316	Nylon	Polypropylene	Seal Material
• Carbon Tetrachloride	X	E	-	E	E	G	-	E	A	X
Carbonic Acid	E	G	G	E	F	G	G	G	X	A
Castor Oil	G	G	G	E	E	G	G	G	X	A
Caustic Potash	X	-	-	E	-	X	G	-	A	A
Caustic Soda (Look at Sodium Hydroxide)										TEVNB
Chlorine (Liquid)	-	-	-	E	G	G	F	-	X	X
Chloroform	-	-	-	G	E	X	-	-	X	X
Chlorosulfonic Acid	-	X	X	E	G	G	X	X	X	T
Cellosolves	G	G	G	G	G	G	G	G	X	A
Clorox (Bleach, 5.5% Cl)	X	-	-	-	-	X	G	-	X	-
Chromic Acid (50%)	G	X	X	G	X	X	-	F	X	X
Citric Acid	F	X	X	E	G	X	-	-	X	A
Coke Oven Gas	G	F	F	-	G	G	G	G	X	X
Copper										TEVNB
• Copper Chloride	X	X	X	G	X	X	X	A	A	TEVNB
• Copper Cyanide	X	X	X	E	X	-	G	X	-	TEVNB
• Copper Sulfate	X	X	X	E	X	X	G	-	A	A
Crysylic Acid (Conc.)	G	X	G	-	F	G	G	G	X	X
Cyclohexane	G	G	G	G	E	G	G	G	A	X
Detergents	G	G	G	E	-	G	G	E	A	A
Disodium Phosphate	-	-	-	-	-	E	E	-	A	A
Dextrose	G	-	-	G	G	-	-	-	A	A
Diesel Fuels	E	E	E	G	-	G	E	E	A	X
Diethylamine	G	X	-	-	E	X	G	G	X	A
Ethers	G	G	G	G	G	G	E	E	A	X
Ethyl										TB
• Ethyl Acetate	-	G	-	G	G	G	G	G	A	X
• Ethyl Chloride	-	G	-	G	G	G	E	-	A	X
Ethylene										TEVB
• Ethylene Dichloride	-	X	G	G	E	G	G	G	A	X
• Ethylene Glycol	E	G	G	E	G	G	G	G	A	X
• Ethylene Chloride	-	-	-	-	G	G	-	-	A	X
• Ethylene Oxide	E	X	X	E	G	G	G	G	X	X
Fatty Acids	E	F	F	E	G	X	E	-	A	A
Ferric										TVNB
• Ferric Chloride	X	G	X	G	X	X	X	X	A	A
• Ferric Hydroxide	-	-	-	E	G	-	E	E	-	TEVNB
Ferrous										TEVNB
• Ferrous Chloride (Sat.)	X	G	X	G	X	-	X	X	X	A
• Ferrous Sulfate	G	G	G	G	G	X	-	G	X	A
Fluboric Acid	X	-	-	E	G	E	-	-	X	A
Formaldehyde (50%)	-	G	G	G	G	X	E	E	X	A
Formic Acid (Anhyd.)	E	G	X	E	G	X	-	-	X	A
Freon										TEVN
• Freon 11	G	G	G	-	E	X	G	G	X	X
• Freon 12	G	G	G	E	G	X	G	G	X	X
• Freon 22	G	G	G	G	G	X	G	G	X	X
Fruit Juices	G	F	G	E	E	X	G	G	A	A
Fuel Oil	G	G	G	G	G	G	G	G	A	X
Furfural	G	G	G	G	G	G	G	G	A	X
										TEN



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Media	Aluminum	Bronze	Brass	Hastelloy, C-276	Monel	Malleable Iron	Stainless Steel 316	Nylon	Polypropylene	Seal Material	
<b>Gasoline</b>											
• Refined Gasoline	G	G	G	G	G	G	G	A	X	TVNB	
• Sour Gasoline	X	G	G	G	X	G	G	A	X	TVNB	
<b>Glucose</b>	G	G	G	-	G	G	G	A	A	TEVNB	
<b>Glue</b>	G	G	G	E	G	G	G	-	-	A	TEVNB
<b>Gelatin</b>	G	G	G	-	G	X	G	A	A	TEVNB	
<b>Glycerine</b>	E	G	E	E	E	G	E	A	A	TEVNB	
<b>Glycols</b>	G	G	G	-	G	G	G	A	A	TEVNB	
<b>Green Liquor</b>	-	-	-	-	-	G	-	-	-	A	TEVNB
<b>Hydrobromic Acid (50%)</b>	X	X	X	G	X	X	X	X	A	TEV	
<b>Hydrobromic Acid (20%)</b>	X	X	X	E	X	X	X	X	A	TEV	
<b>Hydrochloric Acid (20%)</b>	X	X	X	E	F	X	X	X	A	TEVNB	
<b>Hydrochloric Acid (38%)</b>	X	X	X	E	X	X	X	X	A	TEVN	
<b>Hexane</b>	G	G	G	E	G	G	E	E	A	TVNB	
<b>Heptane</b>	G	G	G	E	G	G	G	A	X	TVNB	
<b>Hydrocyanic Acid</b>	G	X	X	G	G	G	G	G	X	TEVN	
<b>Hydrofluosilicic Acid (10-50%)</b>	X	X	G	G	G	X	G	X	X	-	TEVNB
<b>Hydrogen</b>											
• Hydrogen Peroxide (50%)	-	X	X	G	G	X	-	-	X	A	TEV
• Hydrogen Sulfide (Aqua.)	-	-	-	G	G	-	G	X	X	A	TE
• Hydrogen Chloride (Dry Gas)	X	-	G	E	E	G	-	-	X	A	TEVN
• Hydrogen Gas	E	E	E	E	E	-	E	E	X	A	TEVNB
<b>Hypochlorous Acid</b>	X	X	X	G	X	X	X	X	X	X	TEV
<b>Isopropyl Ether</b>	-	G	G	-	G	-	G	E	A	X	T
<b>Iodine</b>	E	X	X	-	E	X	X	X	X	A	TEV
<b>Jet Fuel (JP4, JP5)</b>	G	G	E	E	G	G	G	G	X	X	TV
<b>Kerosene</b>	G	G	G	G	G	G	G	G	X	X	TVNB
<b>Ketones</b>	G	G	G	E	G	G	G	G	A	X	T
<b>Lard Oil</b>	G	G	-	E	G	F	G	G	A	A	TVB
<b>Lactic Acid (25%)</b>	F	G	G	E	X	X	-	-	A	A	TEVN
<b>Lactic Acid (80%)</b>	G	X	G	G	-	X	-	-	A	A	TEVN
<b>Lead</b>											
• Lead Acetate	X	X	X	G	G	X	G	G	X	A	TENB
• Lead Chloride	X	-	-	G	-	-	G	G	X	-	TVNB
• Lead Sulfate	X	-	-	G	G	X	G	G	X	-	TEVNB
<b>Linoleic Acid</b>	G	F	X	G	G	X	G	G	X	A	TVB
<b>Lime Sulphur</b>	X	X	X	-	G	X	G	G	X	A	TEVN
<b>Linseed Oil</b>	G	G	G	G	G	G	G	G	A	A	TVNB
<b>Lubricants (Oil)</b>	G	-	E	-	G	G	G	G	A	X	TVNB
<b>Magnesium</b>											
• Magnesium Carbonate	G	-	-	-	G	-	G	G	X	A	TEVNB
• Magnesium Chloride	X	G	X	E	-	-	-	-	X	A	TEVNB
• Magnesium Hydroxide	G	G	G	E	G	G	E	E	X	A	TEVNB
• Magnesium Nitrate	G	G	G	E	G	G	G	G	X	A	TEVNB
• Magnesium Oxide	-	-	-	-	-	-	-	-	X	-	-
• Magnesium Sulfate	G	G	-	-	E	-	G	G	X	A	TEVNB
<b>Maleic Acid</b>	-	F	G	G	-	X	G	-	X	A	TEV
<b>Mercuric</b>											
• Mercuric Chloride	X	X	X	-	X	X	-	X	X	A	TEVB
• Mercuric Cyanide	X	X	X	G	G	X	G	G	X	A	TEVB

**Corrosion Resistance of Coupling Material**

Media	Aluminum	Bronze	Brass	Hastelloy, C-276	Monel	Stainless Steel 316	Malleable Iron Carbon Steel	Stainless Steel 304	Nylon	Polypropylene	Seal Material
Mercury	X	X	X	E	-	G	E	E	A	A	TEVNB
Methane	E	G	E	E	E	G	E	E	A	X	TEVNB
Methanol	G	G	G	E	G	G	G	G	A	A	TENB
Methyl											
• Methyl Bromide	X	-	-	-	-	G	G	G	X	X	TV
• Methyl Ethyl Ketone	G	G	G	G	G	G	G	G	A	X	TE
• Methyl Isobutyl Ketone	G	G	G	G	G	G	G	G	A	X	T
• Methyl Methacrylate	G	-	-	-	-	X	G	G	X	A	T
Methylene Chloride	-	G	G	X	-	G	-	-	A	X	T
Milk	E	X	X	E	X	G	E	E	A	A	TEVNB
Mineral Oil	G	-	E	-	E	G	G	E	A	A	TVNB
Muriatic Acid	X	-	-	E	X	-	X	X	X	A	TV
Naphthalene	G	G	G	G	G	G	E	E	A	A	TV
Naptha	G	G	G	G	G	G	G	G	A	X	TVB
Nickel											
• Nickel Chloride	X	X	X	-	G	X	-	-	X	A	TEVNB
• Nickel Sulfate	X	-	X	G	-	-	G	G	X	A	TEVNB
Nitric											
• Nitric Acid (100%)	E	X	X	G	X	X	-	G	X	X	TV
• Nitric Acid (50%)	X	X	X	E	X	X	-	G	X	X	TV
• Nitric Acid (30%)	X	X	X	E	X	X	-	E	X	X	TV
Nitrobenzene	E	G	G	-	G	G	G	G	A	A	T
Oils											
• Castor Oil	G	G	G	E	E	G	G	G	A	A	TEVNB
• Coconut Oil	G	G	-	-	G	F	G	G	A	A	TVB
• Corn Oil	G	G	G	-	G	G	G	-	A	A	TVNB
• Mineral Oil	G	-	E	-	E	G	G	E	A	A	TVNB
• Silicon Oil	G	G	E	-	-	G	G	G	A	A	TEVB
• Cotton Seed Oil	G	G	G	-	E	G	G	G	A	A	TVNB
• Fuel Oil	G	G	G	G	G	G	G	G	A	X	TVNB
• Linseed Oil	G	G	G	G	G	G	G	G	A	A	TVNB
• Vegetable Oil	G	G	G	E	E	G	E	E	A	X	TVNB
Oleic Acid	G	G	F	G	E	G	E	-	A	X	TB
Petrolatum	G	G	-	-	G	F	G	G	A	-	TVNB
Oleum	G	X	X	-	X	G	G	G	X	X	TV
Oxalic Acid (Sat.)	G	F	-	F	G	X	X	X	X	A	TEV
Oxygen	G	G	G	-	G	G	G	G	X	X	TEVNB
Paraffin	G	G	G	G	G	G	G	G	A	A	TVNB
Perchloroethylene	G	G	G	G	E	G	-	-	X	X	TV
Phenol (Carbolic Acid)	E	X	E	E	E	G	E	-	X	X	TV
Palmitic Acid (Sat.)	G	G	F	-	G	F	G	G	X	A	TVB
Phosphoric Acid											
• Phosphoric Acid (25-50%)	X	G	X	E	X	X	-	-	X	A	TEVN
• Phosphoric Acid (50-85%)	X	X	X	E	F	X	-	-	X	A	TEV
Picric Acid	E	X	X	G	X	X	G	G	X	-	TEVNB
Photographic Solution	-	-	-	-	E	X	E	E	X	X	TVNB
Phthalic Anhydride	-	G	G	E	E	G	E	E	X	X	TEV
Plating Solution											
• Chrome 40% Plating Solution	X	G	G	E	X	X	G	G	X	A	TEVN
• Copper (Cyanide) Plating Solution	-	-	-	E	-	-	-	-	X	A	TEVNB



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Media	Aluminum	Bronze	Brass	Hastelloy, C-276	Monel	Stainless Steel 316	Stainless Steel 304	Nylon	Polypropylene	Seal Material	
• Gold Plating Solution	-	-	-	E	-	-	E	-	X	A	TEVNB
• Brass Plating Solution	-	-	-	E	-	-	G	-	X	A	TEVNB
• Cadmium Plating Solution	-	-	-	E	-	-	G	-	X	A	TEVNB
• Iron Plating Solution	-	-	-	-	-	-	-	-	X	A	TEVB
• Lead Plating Solution	-	-	-	-	-	-	E	E	X	A	TEVNB
• Tin Plating Solution	-	-	-	E	-	-	F	-	X	A	TEVNB
• Nickel Plating Solution	-	-	-	E	-	-	E	E	X	A	TEVNB
• Silver Plating Solution	-	-	-	E	-	-	E	E	X	A	TEVNB
• Zinc Plating Solution	-	-	-	E	-	-	-	-	X	A	TEVNB
<b>Potassium</b>											
• Potassium Chromate (30%)	G	G	G	G	G	-	G	G	X	A	TEVB
• Potassium Cyanide Solution	X	X	X	G	G	G	G	G	X	A	TEVNB
• Potassium Dichromate (30%)	E	G	G	G	G	G	E	E	X	A	TEVB
• Potassium Hydroxide (90%)	X	X	X	G	G	-	-	X	X	A	TENB
• Potassium Nitrate (80%)	E	G	G	G	G	G	G	G	X	A	TEVNB
• Potassium Permanganate (20%)	G	G	G	E	G	G	G	G	X	A	TEVN
• Potassium Acetate	X	X	X	-	-	G	-	-	A	A	TEVB
• Potassium Bicarbonate (30%)	X	-	G	G	G	G	E	E	A	A	TEVNB
• Potassium Carbonate (50%)	X	X	G	G	G	G	E	E	A	A	TEVNB
• Potassium Chlorate (30%)	G	X	X	-	G	G	E	G	X	A	TEVNB
• Potassium Chloride (30%)	X	G	X	-	E	G	-	-	A	A	TEVNB
• Potassium Sulfate (10%)	E	G	G	E	E	G	E	E	A	A	TEVNB
<b>Propane</b>	E	E	E	G	E	E	G	G	X	X	TVB
<b>Propylene Oxide (90%)</b>	-	-	-	-	-	-	E	E	X	X	TE
<b>Pyridine</b>	G	G	G	-	G	G	G	G	A	X	T
<b>Propylene Glycol</b>	G	G	G	G	G	G	G	G	A	A	TVNB
<b>Pyrogallic Acid</b>	G	G	G	G	G	G	G	G	X	X	TVNB
<b>Silver Nitrate</b>	X	X	X	-	X	X	E	G	X	A	TEVNB
<b>Soap Solutions</b>	G	G	G	E	G	G	G	G	A	A	TEVNB
<b>Sodium</b>											
• Sodium Cyanide	X	X	X	G	X	G	-	-	A	A	TEVNB
• Sodium Dichromate	G	X	X	E	-	G	G	G	X	A	TE
• Sodium Hydroxide (70%)	X	X	X	E	E	F	G	G	X	A	TENB
• Sodium Hydroxide (50%)	X	F	X	E	E	F	-	E	X	A	TENB
• Sodium Hydroxide (30%)	X	F	G	G	E	G	E	E	X	A	TENB
• Sodium Bisulfite	X	G	-	G	-	G	-	-	A	A	TEVNB
• Sodium Bisulfite	X	X	G	G	-	X	-	-	A	A	TEVNB
• Sodium Borate	G	G	G	G	G	F	G	G	A	A	TEVNB
• Sodium Perborate (10%)	G	G	X	G	G	G	G	G	X	A	TEVNB
• Sodium Carbonate	X	-	G	G	E	G	G	-	A	A	TEVNB
• Sodium Chloride (30%)	X	G	G	G	E	G	-	-	X	A	TEVNB
• Sodium Hypochlorite	X	X	X	-	X	X	-	-	X	A	TEV
• Sodium Metaphosphate	X	G	X	-	G	X	G	G	X	X	TEVNB
• Sodium Nitrate (40%)	E	-	G	-	G	G	E	E	A	A	TENB
• Sodium Perborate (10%)	G	G	X	G	G	G	G	G	X	A	TEVNB
• Sodium Peroxide (10%)	G	X	X	G	G	G	G	G	X	A	TEVNB
• Sodium Silicate	E	G	G	G	G	G	G	G	A	A	TEVNB
• Sodium Sulfate	-	G	G	G	-	G	E	-	A	A	TEVNB
• Sodium Acetate	E	G	G	-	G	X	G	G	A	A	TEN
• Sodium Bicarbonate (20%)	G	G	G	E	E	F	E	E	A	A	TEVNB
• Sodium Chlorate (50%)	G	G	G	E	E	X	G	G	X	A	TEVNB

**Corrosion Resistance of Coupling Material**

Media	Aluminum	Bronze	Brass	Hastelloy, C-276	Monel	Stainless Steel 316	Malleable Iron Carbon Steel	Nylon	Polypropylene	Seal Material
• Sodium Sulfide (50%)	X	X	X	G	G	G	-	X	A	TEVNB
• Sodium Thiosulphate	G	X	X	G	G	X	G	A	A	TEVNB
Stannic Chloride	X	X	X	-	X	X	X	X	A	TEVNB
Stannous Chloride	X	X	X	G	-	X	-	X	X	TEVNB
Stoddard's Solvent	G	G	G	E	G	G	G	X	A	TVB
Sugar Liquors (Cane)	E	E	G	-	G	G	G	A	A	TEVNB
Steam	-	-	-	-	-	-	-	X	-	-
Stearic Acid	G	G	F	E	F	F	E	A	A	TVNB
Sugar Liquor (Beet)	E	E	G	-	E	G	E	A	A	TEVNB
Sulfite Liquors	X	-	X	E	X	X	G	X	X	TVNB
Sulfate Liquors	G	X	X	G	G	F	G	-	X	TVNB
Sulfur Chloride	X	X	-	G	X	X	-	X	X	TV
Sulfur Dioxide (Dry)	G	G	G	G	G	E	G	-	X	TE
Sulfur Trioxide	G	X	G	G	G	G	G	-	X	TEV
Sulfuric Acid (TO 10%)	X	X	G	E	X	X	X	X	A	
Sulfuric Acid (100%)	X	X	X	E	X	G	-	-	X	X
Sulfurous Acid	G	X	G	-	X	X	-	X	X	TV
Tannic Acid	X	X	-	-	G	X	G	X	A	TEVNB
Tanning Liquors	E	G	-	E	-	-	E	E	X	TVNB
Tartaric Acid	-	F	-	F	-	-	G	G	A	TVNB
Titanium Tetrachloride	X	X	X	G	G	G	G	-	X	TV
Toluene	E	E	E	E	E	E	E	A	X	TVB
Tetrahydrofuran	X	G	-	E	-	E	G	E	A	X
Tomato Juice	G	F	-	G	G	F	G	X	A	TEVNB
Trichloroethylene	E	G	-	E	-	G	-	-	A	TV
Triethanolamine	G	G	X	G	G	G	G	A	X	TEVN
Triethylamine	-	-	-	-	G	-	G	A	X	TVB
Trisodium Phosphate (10%)	X	-	G	E	G	G	E	A	A	TVNB
Turpentine	G	G	X	G	E	G	E	X	X	TVB
Urea (50%)	G	G	-	-	G	G	G	A	A	TEVNB
Urine	-	-	-	-	-	G	E	X	A	TEVNB
Vinegar	G	G	X	G	G	G	G	X	A	TEVN
Water Acid (Mine)	X	X	X	E	-	X	-	-	A	TEVNB
Water (Distilled)	X	G	G	E	X	X	G	A	A	TEVNB
Water (Sea)	G	G	G	E	G	X	G	A	A	TEVNB
Whiskey	X	G	G	E	G	G	E	X	A	TEVNB
White Liquor (Pulp)	G	X	-	G	X	X	G	X	A	TEVNB
Wine	X	G	G	E	G	X	E	X	A	TEVNB
Xylene	G	G	G	E	G	G	G	A	X	TV
Zinc										
• Zinc Chloride	X	X	X	G	-	X	G	A	A	TEVNB
• Zinc Nitrate	-	-	-	-	-	-	G	X	A	TEVNB
• Zinc Sulfate (50%)	X	G	G	G	G	X	E	X	A	TEVNB