

RECOMMENDED USE DEFINITIONS

IMMERSION SERVICE (Most Severe) – IS

Suitable for continuous contact with chemical exposure up to specified temperature.

CARGO/TEMPORARY IMMERSION – CI

Suitable for 60 day continuous contact with chemical exposure up to specified temperature. Coating will show no effect except slight softening or discoloration, possibly permanent, after 60 days or less continuous immersion. When used in transport or hauling conditions, the vessel must be completely drained to prevent puddling that would constitute continuous immersion.

SECONDARY CONTAINMENT – SC

Suitable for continuous contact up to 72 hours with chemical exposure or vapors. The coating will show no effects, except slight softening or discoloration, after 72 hours exposure to chemical or vapors. Data references the chemical resistance of the coating. System recommendation may include mat- or aggregate-reinforcement depending on substrate and/or exposure conditions.

FREQUENT CONTACT – FC

Suitable for frequent splash or up to 72 hours exposure to concentrated vapors. The coating will show no effects except slight softening or discoloration, possibly permanent, after eight hours continuous immersion in the liquid chemical or 72 hours exposure to the vapor.

OCCASIONAL CONTACT (Least Severe) – OC

Suitable for occasional splash and spillage or occasional exposure to concentrated vapors. The coating shows no effects, except slight softening or discoloration, following short exposure to splash or spillage which evaporates, is hosed off, or dried overnight or, 24 hours exposure to vapor.

NOT EVALUATED - NE

This chemical has not been evaluated for the listed chemical. Please contact Tnemec Technical Services for more information.

NOT RECOMMENDED - NR

This product is not recommended for the listed exposure.

CHEMICAL REFERENCES

The following references may be included in the chemical resistance guide listed below.

- 1 Product is NOT suitable for direct or indirect food contact. Intended Use and temperature information relates to product's performance capabilities only.
- 2 Product is suitable for direct or indirect food contact. Reference product data sheet for more information.
- 3 Service requires elevated temperature post cure (PC) of lining. Reference the product data sheet and application guide for more information.
- 4 System requires use of carbon veil. Reference the product data sheet and application guide for more information.
- 5 System requires use of glass surfacing veil. Reference the product data sheet and application guide for more information.

IMPORTANT NOTES

The term "chemicals" is used broadly in this guide and can refer to various constituents including, but not limited to, acids, fatty acids, food and beverage materials, finished and unrefined hydrocarbons, as well as individual chemicals and chemical blends. Unless otherwise referenced, the concentrations listed are aqueous solutions of the chemicals.

Temperature can have a significant effect on a coating's chemical resistance. Prior to coating selection, due care should be taken to determine the service temperature of stored chemicals, elevated temperature caused by natural environmental conditions (i.e. radiant heat from sun, weather), and temperature fluctuations during service (i.e. loading of cargo, service cycling).

Chemical mixtures and alternating chemical storage can aggressively degrade a coating or lining system. Prior to coating selection and application, the expected chemical exposures and sequence of chemical storage should be discussed with Tnemec Technical Service to ensure the proper coating is selected.

Proper surface preparation is always important to ensure optimum coating performance, but it is even more so for coatings that will undergo chemical exposure. Carefully read product data sheets along with related application guides to determine the required level of surface preparation and surface profile.

Structural designs of tanks, structures, and containment areas can greatly affect coating performance. Sharp angles, channels, edges, corners, pits, voids, defects, rough welds, and other similar conditions present areas that are either difficult to coat or achieve the required film thickness. Avoid skip welds in favor of continuous welds. A stripe coat on these areas, prior to full coating application, can help achieve needed film thickness and prevent premature coating failure. (Reference NACE SP0178-2007 for more information.)

The length of a coating system's service life depends on surface cleanliness and preparation prior to application, proper application procedures, exposure conditions, physical abuse, cleaning techniques, and frequency of inspection, maintenance, and repair. No coating system has an unlimited service life. Regular inspection of the coating system can prolong service life by identifying areas in need of repair. Additionally, regular inspections can determine when the coating system is nearing its end of service and should be completely replaced.

Chemical resistance information is provided for the purpose of establishing a general profile of the coating and was obtained through laboratory testing, field experience, and industry knowledge. Test results were produced in a controlled environment and Tnemec makes no claim that any tests, or published chemical resistance information, accurately represent all environments or correlate to actual field performance. Application, environmental and design factors, chemical temperatures, chemical mixtures, sequence of storage, conditions of service, and cleaning procedures can significantly impact coating performance, so due care must be exercised in the selection and use of the coating. Tnemec disclaims responsibility for product use outside its published information. Contact Tnemec Technical Service to review full project details before the coating or coating system is selected and applied.

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Chemical	Intended Use (Maximum Temperature Listed)				
	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
1, 1, 1-Trichloroethane (Trichloroethane)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Acetaldehyde	NR	NR	NR	NR	NR
Acetic Acid					
5%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Acetic Acid, Glacial	300°F (149°C)	300°F (149°C)	NR	NR	NR
Acetic Anhydride	NR	NR	NR	NR	NR
Acetone	NR	NR	NR	NR	NR
Acetonitrile					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
100%	NR	NR	NR	NR	NR
Acetyl Chloride	NR	NR	NR	NR	NR
Acrylic Acid	NR	NR	NR	NR	NR
Acrylic Latex Solution	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Acrylonitrile	NR	NR	NR	NR	NR
Activated Carbon (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Adipic Acid					
25%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Adipic Acid (Dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Alkyl Glycidyl Ether	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Allyl Alcohol	NR	NR	NR	NR	NR
Allyl Chloride	NR	NR	NR	NR	NR
Aluminum Bromide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Aluminum Chloride					

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Chemical	Intended Use (Maximum Temperature Listed)				
	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
25%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	140°F (60°C) - RS-1.1	140°F (60°C) - RS-1.1
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	140°F (60°C) - RS-1.1	140°F (60°C) - RS-1.1
Aluminum Hydroxide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Aluminum Nitrate					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	140°F (60°C) - MB-5.0
Aluminum Sulfate (Alum)					
49%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ammonium Bisulfite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-1.0	140°F (60°C) - RS-1.0
Ammonium Carbonate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Ammonium Chloride					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-3.0	140°F (60°C) - RS-3.0
Ammonium Fluoride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	80°F (27°C) - RS-7.1	80°F (27°C) - RS-7.1
Ammonium Fluosilicate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ammonium Hydroxide (Aqua Ammonia)					
5%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	120°F (49°C) - RS-3.1	120°F (49°C) - RS-3.1
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	120°F (49°C) - RS-3.1	120°F (49°C) - RS-3.1
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	120°F (49°C) - RS-3.1	120°F (49°C) - RS-3.1
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NR	NR
35%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	140°F (60°C) - RS-3.1	140°F (60°C) - RS-3.1
Ammonium Lauryl Sulfate					
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0

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Ammonium Nitrate					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
38%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
65%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
83%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ammonium Nitrite					
50%	NR	NR	NR	NR	NR
Ammonium Perchlorate (Dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	140°F (60°C) - MB-5.0
Ammonium Persulfate					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ammonium Phosphate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ammonium Sulfamate					
46%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ammonium Sulfate					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
65%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ammonium Sulfide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Ammonium Sulfite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Ammonium Thiocyanate					
55%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ammonium Thiosulfate					

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60%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ammonium Xylene Sulfonate					
40%	NR	NR	NR	NR	NR
Amyl Acetate	300°F (149°C)	300°F (149°C)	NR	NR	NR
Amyl Alcohol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Aniline	NR	NR	NR	NR	NR
Aniline Hydrochloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Animal Fats	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Antimony Chloride (tri)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - RS-1.0	150°F (66°C) - RS-1.0
Aqua Regia	NR	NR	NR	NR	NR
Arsenous Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - RS-1.0	150°F (66°C) - RS-1.0
ASTM Reference (Fuels A & C)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Aviation Gas	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
B20 Bio Diesel	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Barium Chloride					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Barium Hydroxide					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - RS-1.0	150°F (66°C) - RS-1.0
Barium Nitrate	300°F (149°C)	300°F (149°C)	NR	NR	NR
Barium Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Barium Sulfide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Beer (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Benzal Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR

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Benzaldehyde	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Benzene	NR	NR	NR	NR	NR
Benzene Sulfonic Acid	300°F (149°C)	300°F (149°C)	NR	NR	NR
Benzene Thiol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Benzoic Acid	NR	NR	300°F (149°C) - RS-1.0	130°F (54°C)	130°F (54°C)
Benzoyl Chloride	NR	NR	NR	NR	NR
Benzyl Alcohol	NR	NR	NR	NR	NR
Benzyl Chloride	NR	NR	NR	NR	NR
Biodiesel (<2% FAME)	150°F (66°C)	150°F (66°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Borax Solution (sat'd)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Boric Acid					
5%	300°F (149°C) - MB-5.0	300°F (149°C) - MB-5.0	300°F (149°C) - RS-1.0	120°F (49°C)	120°F (49°C)
Brake Fluid (DOT 3)	300°F (149°C) - MB-5.0	300°F (149°C) - MB-5.0	300°F (149°C) - RS-1.0	100°F (38°C)	100°F (38°C)
Bromine Gas (Dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Bromine Gas (Wet)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Brown Stock	160°F (71°C)	160°F (71°C)	300°F (149°C) - RS-1.0	160°F (71°C) - RS-3.0	160°F (71°C) - RS-3.0
Butyl Acrylate	NR	NR	NR	NR	NR
Butyl Amine	NR	NR	NR	NR	NR
Butyl Ether	NR	NR	NR	NR	NR
Butyric Acid	140°F (60°C)	140°F (60°C)	NR	NR	NR
Cadmium Bromide					
10%	300°F (149°C)	300°F (149°C)	NR	NR	NR
Cadmium Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	130°F (54°C) - MB-5.0
Cadmium Plating (Cyanide)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR

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Calcium Bisulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-1.0	130°F (54°C) - RS-1.0
Calcium Bisulfite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	160°F (71°C) - RS-1.0	160°F (71°C) - RS-1.0
Calcium Bromide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	130°F (54°C) - MB-5.0
Calcium Carbonate (Limestone Slurry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - RS-5.0	130°F (54°C) - RS-5.0
Calcium Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Calcium Hydroxide (Lime Slurry)					
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	170°F (77°C) - RS-5.0	170°F (77°C) - RS-5.0
Calcium Hypochlorite					
5%	300°F (149°C)	300°F (149°C)	NR	NR	NR
Calcium Nitrate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Calcium Nitrite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Calcium Oxide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Calcium Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Calcium Sulfite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Canola Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Canola Oil (crude) (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Caprolactam	NR	NR	NR	NR	NR
Caprylic Acid (Octanoic Acid)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Carbon - Activated (slurry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Carbon Bisulfide Fumes (wet)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Carbon Dioxide (gas)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-3.0	150°F (66°C) - MB-3.0

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	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Carbon Disulfide	NR	NR	NR	NR	NR
Carbon Tetrachloride	NR	NR	NR	NR	NR
Castor Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Caustic Liquor	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Caustic Potash	NR	NR	NR	NR	NR
Chlorine Dioxide (gas)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Chloroacetic Acid					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	110°F (43°C) - MB-5.0	110°F (43°C) - MB-5.0
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
100%	300°F (149°C)	300°F (149°C)	NR	NR	NR
Chlorobenzene	NR	NR	NR	NR	NR
Chlorobutane	NR	NR	NR	NR	NR
Chloroform	NR	NR	NR	NR	NR
Chlorophenol	NR	NR	NR	NR	NR
Chlorosulfonic Acid	NR	NR	NR	NR	NR
Chlorotoluene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Chromic Acid					
10% (3)	120°F (49°C)	120°F (49°C)	300°F (149°C) - RS-1.0	110°F (43°C) - MB-5.0	110°F (43°C) - MB-5.0
20% (3)	110°F (43°C)	110°F (43°C)	300°F (149°C) - RS-1.0	110°F (43°C) - MB-5.0	110°F (43°C) - MB-5.0
Chromic Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Citric Acid					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Coal (high and low sulfur)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Coconut Oil (refined) (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR

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	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Cola (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Copper (I) Chloride (Cuprous Chloride)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Copper Acetate					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - RS-1.0	150°F (66°C) - RS-1.0
Copper Nitrate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Copper Plating (Acid)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Copper Plating (Cyanide)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Copper Sulfate					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Copper Sulfate (dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Corn Mash Solution (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Corn Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Cottonseed Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Cresylic Acid (Cresol)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Crude Oil (Sour)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	170°F (77°C) - MB-5.0	170°F (77°C) - MB-5.0
Crude Oil (Sweet)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	170°F (77°C) - MB-5.0	170°F (77°C) - MB-5.0
Cumene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Cumene Hydroperoxide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Cyclohexane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0

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Cyclohexanol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Cyclohexanone	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Cyclohexylamine	NR	NR	NR	NR	NR
Cymene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Dextrose (d-glucose)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Diacetone Alcohol	NR	NR	NR	NR	NR
Dibutyl Phthalate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Dichloroacetic Acid					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Diesel Emissions Fluid (32.5% Urea Solution)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Diesel Fuel (Fuel Oil, Diesel Oil)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Diethylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Diethylene Glycol Bis-Chloroformate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Diethylene Glycol Monobutyl Ether (Butyl "Carbitol")	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Diethylene Glycol Monobutyl Ether Acetate (Butyl "Carbitol" Acetate)	NR	NR	300°F (149°C) - RS-1.0	NE	NE
Diethylenetriamine	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Diethylketone	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Diglycolamine					
62%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Dimethyl Carbamoyl Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Dimethyl Formamide	NR	NR	NR	NR	NR
Dimethyl Sulfoxide	NR	NR	NR	NR	NR

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	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Dimethylaminopropylamine	NR	NR	NR	NR	NR
Dimethylaniline	NR	NR	NR	NR	NR
Dimethylcarbamoyl Chloride	NR	NR	NR	NR	NR
Dinitrobenzene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Dinitrotoluene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Diocetyl Phthalate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Dipropylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Dodecyl Alcohol (Lauryl Alcohol)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ethanol (Denatured Alcohol, Ethyl Alcohol)					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
95%	NR	NR	NR	NR	NR
100%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ethanolamine	NE	NE	NE	NE	NE
Ethoxy Ethanol	NR	NR	NR	NR	NR
Ethoxylated Nonyl Phenol	300°F (149°C)	300°F (149°C)	NR	NR	NR
Ethyl Acetate	NR	NR	NR	NR	NR
Ethyl Acrylate	NR	NR	NR	NR	NR
Ethyl Benzene	NR	NR	NR	NR	NR
Ethyl Bromide	NR	NR	NR	NR	NR
Ethyl Chloride	NR	NR	NR	NR	NR
Ethyl Chloroformate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ethyl Ether	NR	NR	NR	NR	NR
Ethyl Hexyl Acrylate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ethyl Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	90°F (32°C) - MB-5.0	90°F (32°C) - MB-5.0
Ethyl Tert-Butyl Ether (ETBE)	NR	NR	NR	NR	NR

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Ethylamine					
20%	120°F (49°C)	120°F (49°C)	NR	NR	NR
70%	120°F (49°C)	120°F (49°C)	NR	NR	NR
Ethylene Dichloride	NR	NR	NR	NR	NR
Ethylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ethylene Glycol Monobutyl Ether (Butyl "Cellosolve")	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Ethylene Glycol Monobutyl Ether Acetate (Butyl "Cellosolve" Acetate)	NE	NE	NE	NE	NE
Ethylene Oxide	NR	NR	NR	NR	NR
Ethylenediamine					
20%	NR	NR	NR	NR	NR
Fatty Acids (Greater than C6)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Ferric Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Ferric Nitrate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Ferric Sulfate					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
60%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Ferrous Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	140°F (60°C) - MB-5.0
Fish Oil	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Fluoboric Acid	NR	NR	NR	NR	NR
Fluorosilicic Acid (Hydrofluorosilicic Acid)					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NR	NR
25%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NR	NR
Formaldehyde					

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37%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Formic Acid					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Fructose (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Furan	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Furfural					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Furfuryl Alcohol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Gasohol E10 (10% Ethanol)	NR	NR	NR	NR	NR
Gasohol E15 (15% Ethanol)	NR	NR	NR	NR	NR
Gasohol E30 (30% Ethanol)	NR	NR	NR	NR	NR
Gasohol E50 (50% Ethanol)	NR	NR	NR	NR	NR
Gasohol E85 (85% Ethanol)	NR	NR	NR	NR	NR
Gasoline (Reformulated)	NR	NR	NR	NR	NR
Gasoline (Unleaded)	NR	NR	NR	NR	NR
Gasoline (with ETBE, 15% max)	NR	NR	NR	NR	NR
Gasoline (with MTBE, 15% max)	NR	NR	NR	NR	NR
Gasoline (with TAME, 15% max)	NR	NR	NR	NR	NR
Gasoline (with TBA, 15% max)	NR	NR	NR	NR	NR
Gelatine (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Gluconic Acid					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Glucose (1) (l-glucose)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Glycerin	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Glycolic Acid					

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70%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Gold Plating (Cyanide)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Gold Plating Solution	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Grape Juice (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Grapefruit Juice (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Guar Gum (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Heptane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Hexane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Hexanol	300°F (149°C)	300°F (149°C)	NR	NR	NR
Hexylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Hydraulic Fluid (Hydraulic Oil)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Hydrazine					
35%	300°F (149°C)	300°F (149°C)	RS-1.1	140°F (60°C) - RS-3.1	140°F (60°C) - RS-3.1
Hydrazine Hydrate	NR	NR	NR	NR	NR
Hydrobromic Acid					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
48%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Hydrochloric Acid					
5%	150°F (66°C)	150°F (66°C)	NR	NR	NR
10%	150°F (66°C)	150°F (66°C)	NR	NR	NR
15%	150°F (66°C)	150°F (66°C)	NR	NR	NR
20%	150°F (66°C)	150°F (66°C)	NR	NR	NR
28%	150°F (66°C)	150°F (66°C)	NR	NR	NR
33%	150°F (66°C)	150°F (66°C)	NR	NR	NR

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36%	NR	NR	NR	NR	NR
37%	NR	NR	NR	NR	NR
Hydrofluoric Acid					
3%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NE	NE
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NE	NE
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NE	NE
Hydrofluoroboric Acid					
62%	NR	NR	NR	NR	NR
Hydrogen Peroxide					
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Hydrogen Sulfide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Hydroiodic Acid					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Hypochlorous Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Iodine					
5%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Iodine (Crystals and vapor)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Isobutyl Acetate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Isobutyl Alcohol	300°F (149°C)	300°F (149°C)	NR	NR	NR
Isooctane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Isooctylthioglycolate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Isophorone	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Isopropyl Alcohol (Isopropanol)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0

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Chemical	Intended Use (Maximum Temperature Listed)				
	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Isopropyl Ether	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Jet A Fuel	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
JP-4 Aviation Fuel	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
JP-5 Aviation Fuel	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Kaolin	NR	NR	NR	NR	NR
Kerosene	NE	NE	NE	NE	NE
Lactic Acid					
2% (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	MB-5.0	MB-5.0
10% (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	MB-5.0	MB-5.0
85% (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	MB-5.0	MB-5.0
Lard (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Lauric Acid	NR	NR	NR	NR	NR
Lauryl Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Lead Acetate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Lecithin	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Levulinic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Levulinic Acid, Butyl Ester	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Linseed Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Lithium Bromide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Lithium Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Lithium Hydroxide					
10% (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	140°F (60°C) - RS-7.1	140°F (60°C) - RS-7.1

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	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Lithium Hydroxide (saturated) (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	130°F (54°C) - RS-7.1	130°F (54°C) - RS-7.1
Lubricating Oil (SAE 5W-40, et al) (Motor Oil)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Magnesium Bisulfite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Magnesium Chloride					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Magnesium Hydroxide					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Magnesium Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Maleic Acid					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Maleic Anhydride	NR	NR	NR	NR	NR
Malic Acid	300°F (149°C)	300°F (149°C)	NR	NR	NR
MEK	NR	NR	NR	NR	NR
Mercuric Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Mercury	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Mercury and Salts	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	160°F (71°C) - MB-5.0	160°F (71°C) - MB-5.0
Methacrylic Acid	NR	NR	NR	NR	NR
Methane Gas	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Methanol (Methyl Alcohol)	NE	NE	NE	NE	NE
Methyl Acetate	NR	NR	NR	NR	NR
Methyl Acrylate	NR	NR	NR	NR	NR
Methyl Amyl Alcohol	NR	NR	NR	NR	NR
Methyl Amyl Ketone	NR	NR	NR	NR	NR
Methyl Chloride	NR	NR	NR	NR	NR

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	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Methyl Ethyl Ketone	NR	NR	NR	NR	NR
Methyl Isobutyl Chloride	NR	NR	NR	NR	NR
Methyl Isobutyl Ketone	100°F (38°C)	100°F (38°C)	NR	NR	NR
Methyl Methacrylate	NR	NR	NR	NR	NR
Methyl Oleate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Methyl Propyl Ketone	NR	NR	NR	NR	NR
Methyl tert-Butyl Ether (MTBE)	NR	NR	NR	NR	NR
Methylene Chloride	NR	NR	NR	NR	NR
Milk (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Mineral Oil	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Mineral Spirits	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Molasses (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Morpholine	NR	NR	NR	NR	NR
Mustard (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Naphtha	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Naphthalene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Naphthenic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
n-Butyl Acetate (Butyl Acetate)	NR	NR	NR	NR	NR
n-Butyl Alcohol (1-Butanol) (Butanol (Normal))	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
n-Decyl Alcohol (Decyl Alcohol (1-Decanol))	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Nickel Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Nickel Plating (bright)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Nitric Acid					

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Chemical	Intended Use (Maximum Temperature Listed)				
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5%	300°F (149°C) - RS-1.0	300°F (149°C) - RS-1.0	300°F (149°C) - RS-1.0	NE	NE
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
25%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
35%	120°F (49°C)	120°F (49°C)	NE	NE	NE
60%	NR	NR	NR	NR	NR
70%	NR	NR	NR	NR	NR
Nitrioltriethanol	NR	NR	NR	NR	NR
Nitrobenzene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Nitromethane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
n-Methyl-2-Pyrrolidone	NR	NR	NR	NR	NR
n-Octyl Alcohol (Octanol)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
n-Propyl Alcohol (Propyl Alcohol)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	110°F (43°C) - MB-5.0	110°F (43°C) - MB-5.0
Oleic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Olive Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Orange Juice (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Oxalic Acid					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Ozone <2 ppm	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Palm Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Palm Oil (crude) (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Palmitic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0

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Palmitoleic Fatty Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Parrafin Wax	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Peanut Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Pelargonic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Pentachloroethane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Pentane	NR	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Perchloric Acid					
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Perchloroethylene (Tetrachloroethylene)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Petroleum Ether	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Petroleum Jelly	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Petroleum Oil	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Phenol (Carbolic Acid)	NR	NR	NR	NR	NR
Phenolsulfonic Acid					
65%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Phosphoric Acid					
5%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
25%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
43%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
85%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0

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Phosphorous	NE	NE	NE	NE	NE
Phosphorous Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Phosphorous Oxychloride	NR	NR	NR	NR	NR
Phosphorous Trichloride	NR	NR	NR	NR	NR
Phthalic Acid (all)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Picric Acid					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Picric Acid (conc)	NR	NR	NR	NR	NR
Pine Oil	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Polyacrylic Acid					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Polyaluminum Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Polyethylene (Plastic Pellets)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Polyethylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C)
Polymer Emulsion	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Polymer Mannich	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Polypropylene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Polystyrene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Polytetrafluoroethane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Polyvinyl Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Potash Ore	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Potassium Acetate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0

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Potassium Bicarbonate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	160°F (71°C) - MB-5.0	160°F (71°C) - MB-5.0
Potassium Bromide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Potassium Carbonate					
25% (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Potassium Chlorate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Potassium Chloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Potassium Cyanide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Potassium Ferricyanide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Potassium Fluoride (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Potassium Hydroxide					
50% (3) (5)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-7.1	140°F (60°C) - RS-7.1
Potassium Iodide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Potassium Nitrate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Potassium Permanganate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Potassium Persulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Potassium Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Propanediol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	110°F (43°C) - MB-5.0	110°F (43°C) - MB-5.0
Propionic Acid					
20%	130°F (54°C)	130°F (54°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
50%	130°F (54°C)	130°F (54°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
100%	120°F (49°C)	120°F (49°C)	NR	NR	NR
Propylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0

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	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Pulpmill (Black Liquor) (3) (5)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-7.1	140°F (60°C) - RS-7.1
Pulpmill (Green Liquor) (3) (5)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-7.1	140°F (60°C) - RS-7.1
Pulpmill (White Liquor) (3)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	160°F (71°C) - RS-3.1	160°F (71°C) - RS-3.1
Pyridine					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
100%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Salicylaldehyde	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Salicylic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Silicic Acid	NR	NR	NR	NR	NR
Silicon Tetrachloride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Silicone Fluids	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Silver Nitrate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Skydrol	NR	NR	NR	NR	NR
Sodium Acetate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Aluminate (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Sodium Bicarbonate (1) (Baking Soda)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Sodium Bisulfate					
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Bisulfite					
38%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Borate (Borax)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Bromate					

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5%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Sodium Bromide (all)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Carbonate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Sodium Carbonate (sat'd) (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Sodium Carbonate (slurry) (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Sodium Chlorate					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Chloride (sat'd) (Brine, Water (Sea), Salt Brine) (3)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Sodium Chlorite (>6 pH)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Sodium Chromate					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Sodium Dichromate (all)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Fluoride (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	140°F (60°C) - RS-7.1	140°F (60°C) - RS-7.1
Sodium Formate					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Sodium Hexametaphosphate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Sodium Hydrosulfide					
45%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Sodium Hydrosulfite					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Sodium Hydroxide (Caustic Soda)					

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50% (3) (5)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Sodium Hypochlorite (Bleach)					
6%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	120°F (49°C) - RS-1.1	120°F (49°C) - RS-1.1
13%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NR	NR
15%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	NR	NR
Sodium Lauryl Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Sodium Nitrate					
40%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Sodium Nitrate (dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Oxalate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Sodium Peroxide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Sodium Phosphate					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Sodium Polymethacrylate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Sodium Silicate (4)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.1	150°F (66°C) - RS-7.1	150°F (66°C) - RS-7.1
Sodium Silicofluoride	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Sodium Sulfate					
6%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sodium Sulfide (all)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Sodium Sulfite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0

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Sodium Tartrate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Sodium Thiosulfate					
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Sodium Tripolyphosphate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Solvesso 100	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Sorbital (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Soy Sauce (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-2.0	NR	NR
Soya Fatty Acids	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Soybean Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Stannic Chloride (all)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Stannous Chloride (all)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Starch	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Stearic Acid (conc)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Stoddard Solvent	300°F (149°C)	300°F (149°C)	NR	NR	NR
Styrene	NR	NR	NR	NR	NR
Sugars (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Sulfamic Acid					
25%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Sulfite Liquor (paper industry)	PC	PC	PC	PC	PC
Sulfur Dioxide (dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	225°F (107°C) - MB-5.0	225°F (107°C) - MB-5.0
Sulfur Dioxide (wet)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Sulfur Trioxide (dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0

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Sulfur Trioxide (wet)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	PC	PC
Sulfuric Acid (Sulphuric Acid)					
5%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
30%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
70%	NR	NR	NR	NR	NR
98%	NR	NR	NR	NR	NR
Sulfurous Acid					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Sunflower Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tall Oil	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Tall Oil (fatty acid)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Tallow	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - SS-3.2	150°F (66°C) - SS-3.2
Tannic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Tartaric Acid (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Tertiary-Amyl Methyl Ether (TAME)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tertiary-Butyl Alcohol (TBA) (Butanol (Tertiary))	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tetrachloroethane	300°F (149°C)	300°F (149°C)	NR	NR	NR
Tetrahydrofuran	300°F (149°C)	300°F (149°C)	NR	NR	NR
Tetrahydrofurfuryl Alcohol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tetrasodium Pyrophosphate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR

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Thionyl Chloride	NR	NR	NR	NR	NR
Thionyl Chloride (water solution)	300°F (149°C)	300°F (149°C)	NR	NR	NR
Titanium Dioxide (dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Titanium Dioxide (slurry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	150°F (66°C) - MB-5.0	150°F (66°C) - MB-5.0
Toluene (Toluol)	300°F (149°C)	300°F (149°C)	NR	NR	NR
Toluenesulfonic Acid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Toluidine	NR	NR	NR	NR	NR
Tomato Juice (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tomato Paste	300°F (149°C)	300°F (149°C)	NR	NR	NR
Transmission Fluid	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tributoxyethyl Phosphate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Trichloroacetic Acid					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Trichlorobenzene	NR	NR	NR	NR	NR
Trichloroethylene (Vinyl Trichloride)	NR	NR	NR	NR	NR
Trichlorofluoroethane	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Tricresyl Phosphate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Triethanolamine (TEA)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	100°F (38°C) - MB-5.0	100°F (38°C) - MB-5.0
Triethyl Phosphite	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Triethylamine	300°F (149°C)	300°F (149°C)	NR	NR	NR
Triethylene Glycol	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Triethylenetetramine	300°F (149°C)	300°F (149°C)	NR	NR	NR
Tris-(Dibromopropyl) Phosphate	300°F (149°C)	300°F (149°C)	NR	NR	NR

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Trisodium Phosphate (Sodium Phosphate (Tribasic))					
20%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0
Turpentine	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - RS-1.0	120°F (49°C) - RS-1.0
Urea					
50%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Urea Ammonium Nitrate					
32%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	110°F (43°C) - MB-5.0	110°F (43°C) - MB-5.0
Vegetable Oil (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NE	NE
Vinegar (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Vinyl Chloride	NR	NR	NR	NR	NR
Water (deionized, non-potable) (1) (3) (Water (Demineralized, Non-potable))	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-3.0	140°F (60°C) - RS-3.0
Water (distilled, non-potable) (1) (3)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-3.0	140°F (60°C) - RS-3.0
Water (fresh, non-potable) (3)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - RS-3.0	140°F (60°C) - RS-3.0
Wine (alcohol by volume)					
10%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-3.0	140°F (60°C) - MB-3.0
Xylene	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	80°F (27°C) - MB-3.0	80°F (27°C) - MB-3.0
Yeast (1)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	NR	NR
Zinc Bromide	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Zinc Chloride					
40%	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Zinc Phosphate (dry)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	120°F (49°C) - MB-5.0	120°F (49°C) - MB-5.0
Zinc Plating (Acid Fluoborate)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0

IMPORTANT: Definitions for the terms and acronyms used in this guide to describe the recommended exposures, along with other important information, can be found on the cover page of this guide or by contacting Tnemec Technical Service. Coatings should not be applied in a chemical exposure environment until the user has thoroughly read and understood the product information and full project details have been discussed with Tnemec Technical Service.

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Chemical	Intended Use (Maximum Temperature Listed)				
	Occasional Contact	Frequent Contact	Secondary Containment	Cargo Immersion	Immersion Service
Zinc Plating (Acid Sulfate)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Zinc Plating (Cyanide)	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	140°F (60°C) - MB-5.0	140°F (60°C) - MB-5.0
Zinc Sulfate	300°F (149°C)	300°F (149°C)	300°F (149°C) - RS-1.0	130°F (54°C) - MB-5.0	130°F (54°C) - MB-5.0

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