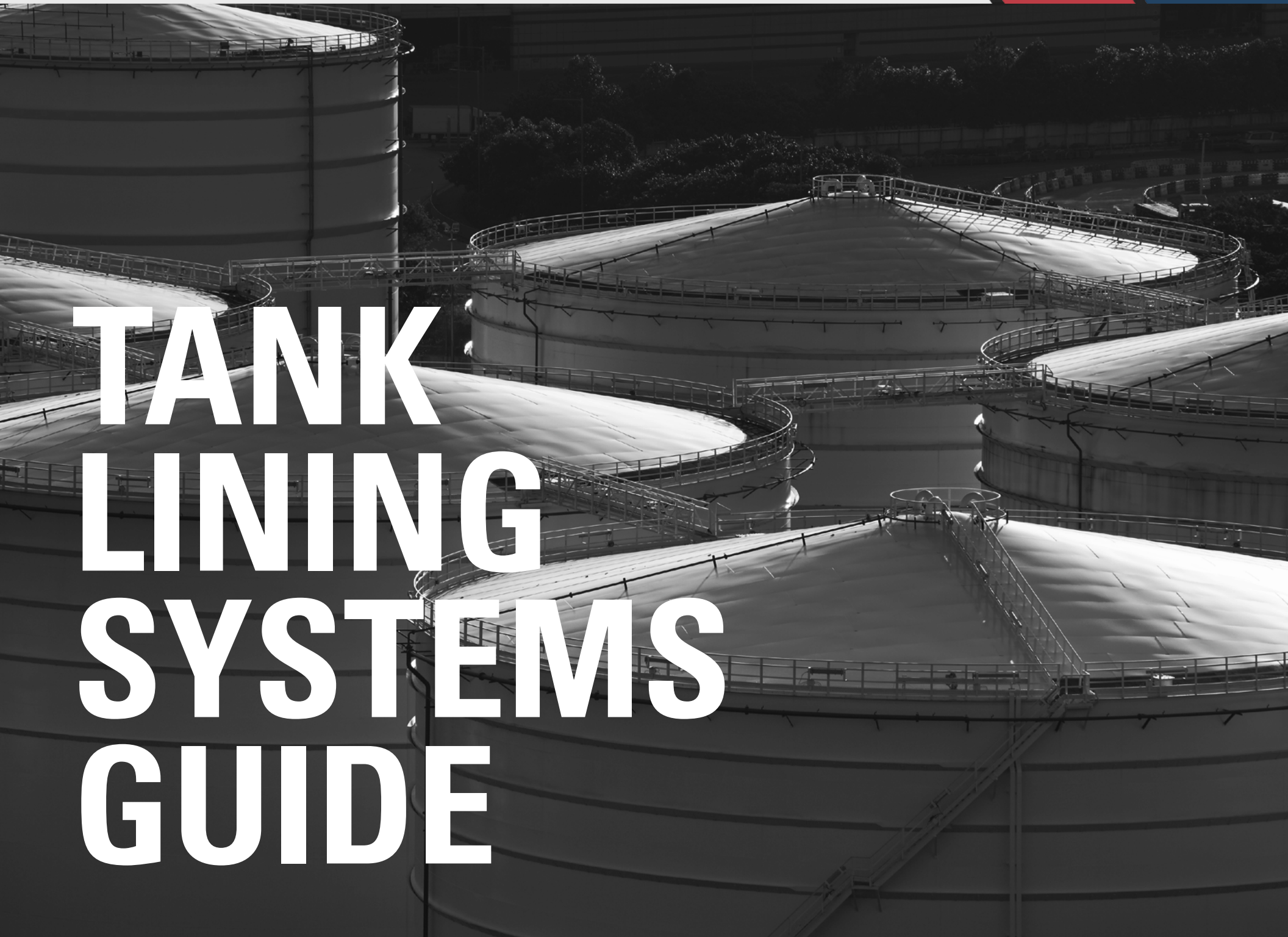
US COATINGS



TANK LINING SYSTEMS GUIDE

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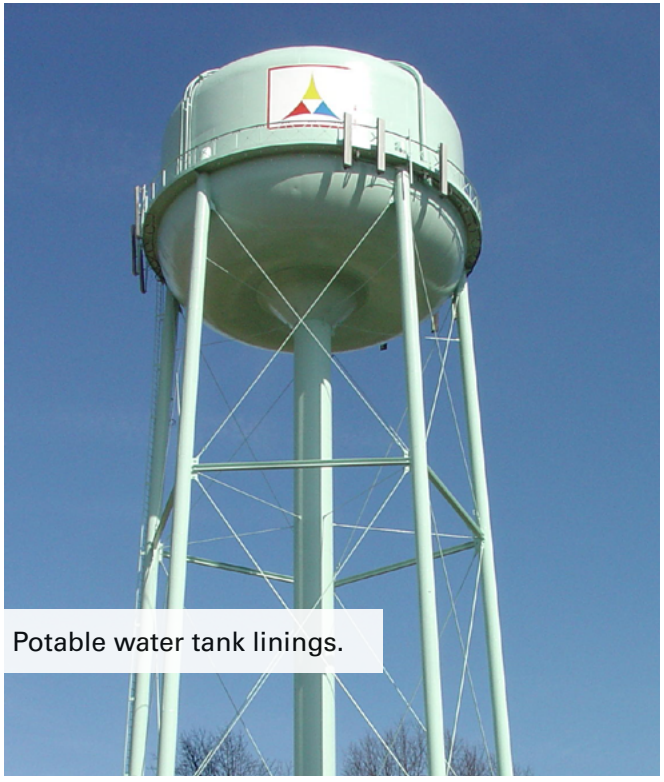
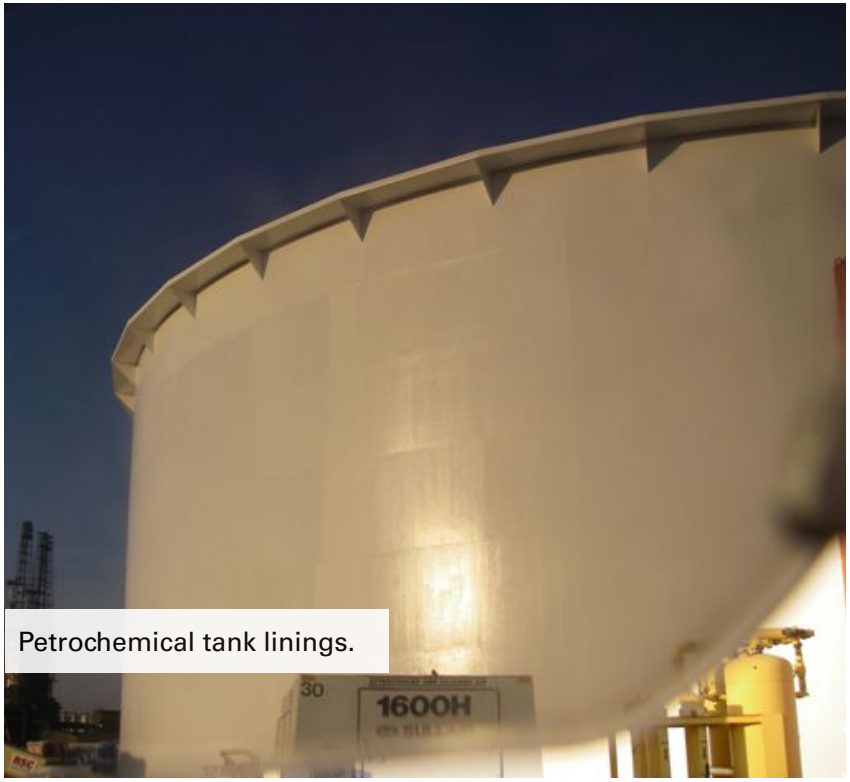
Wastewater concrete linings.

Professional contractor installation.



Potable water tank linings.

Potable water tank linings.



Petrochemical tank linings.

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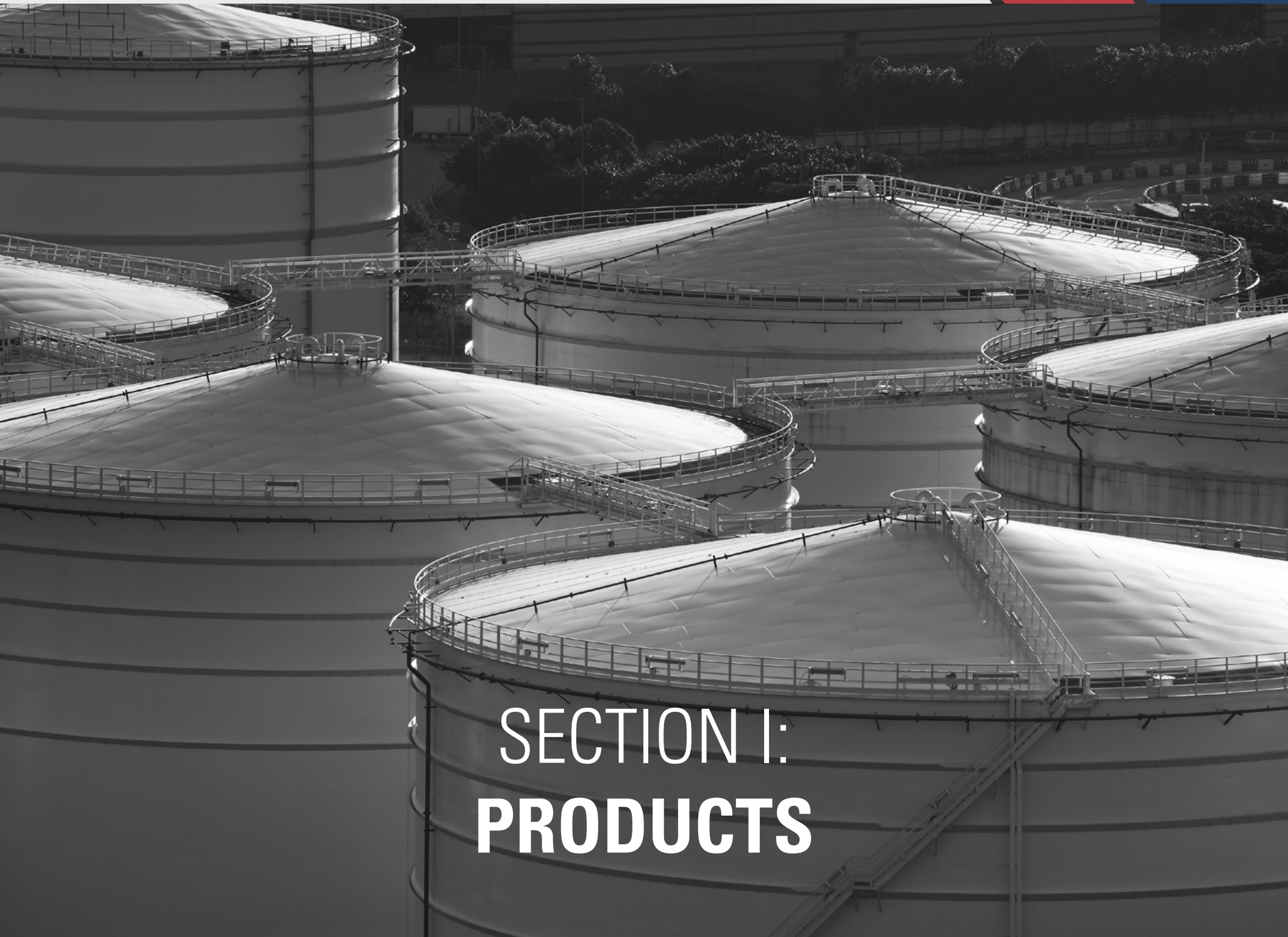
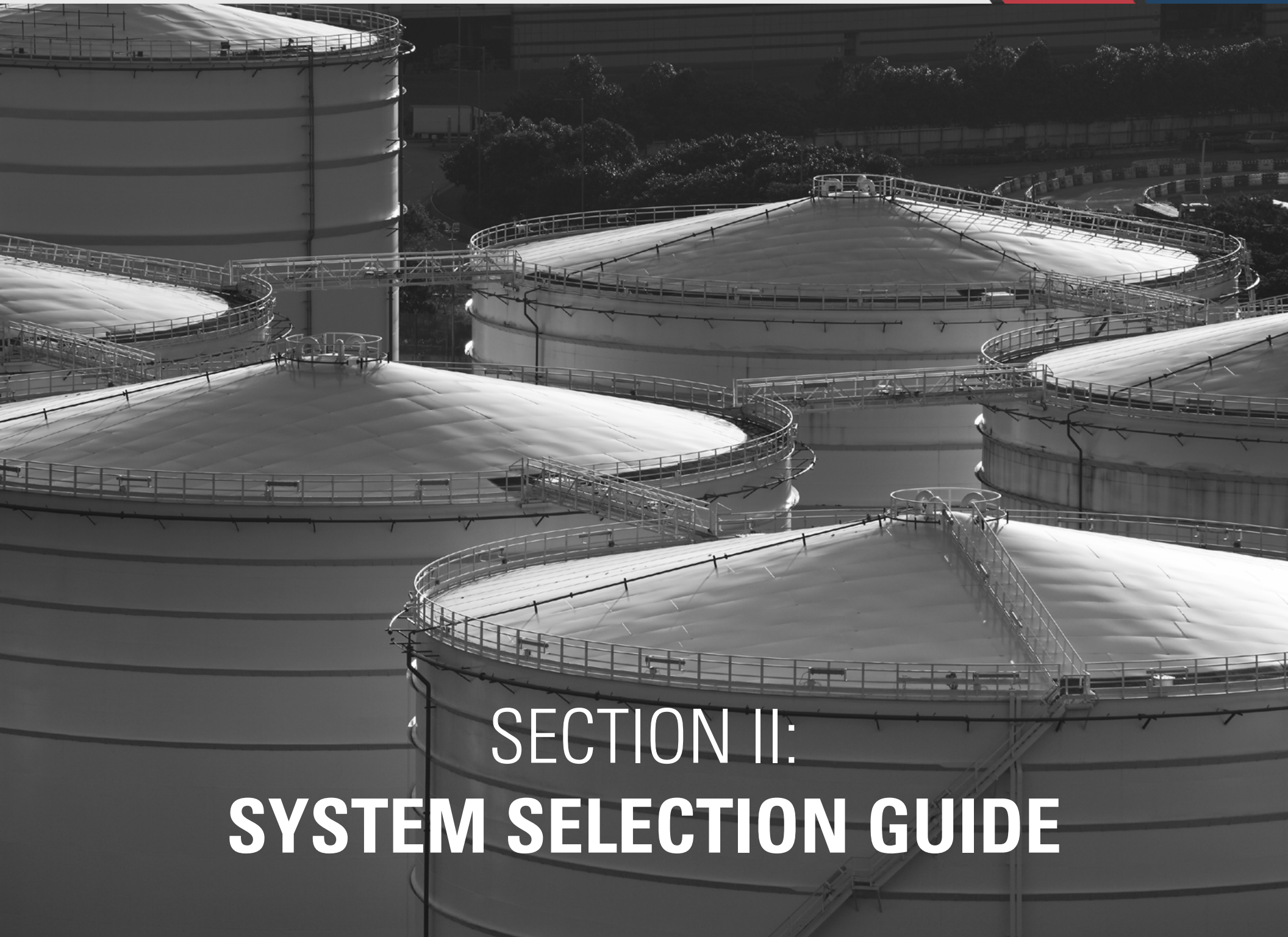


SECTION I:
PRODUCTS

Products

Product Number	Generic Description
GripLine 6000	Modified Phenolic – FDA Compliant
GripLine 6100	Novolac Epoxy – Thin Film
GripLine 6110	Glass Flake Novolac Epoxy – Thin Film
GripLine 6130	General Service Epoxy Lining
GripLine 6200	100% Solids Epoxy - Thick Film
GripLine 6210	100% Solids Flake-Filled Epoxy – Thick Film
GripLine 6220	100% Solids Epoxy - Thick Film
GripLine 6300-G	Vinyl Ester – Gel Coat
GripLine 6300-S	Vinyl Ester – Sprayable
GripLine 6300-T	Vinyl Ester – Trowelable
GripLine 6310-S	Glass Flake Vinyl Ester – Sprayable
GripLine 6310-T	Glass Flake Vinyl Ester - Trowelable
GripLine 6400	100% Solids Urethane – NSF Approved
GripLine 6450	100% Solids Epoxy – NSF Approved
GripLine 6500	100% Solids Novolac Epoxy – Thick Film
GripLine 6510	100% Solids Novolac Glass Flake – Thick Film
GripLine 6520	100% Solids Novolac Epoxy – Thick Film
GripLine 6700	Modified Epoxy – FDA Compliant



SECTION II:
SYSTEM SELECTION GUIDE

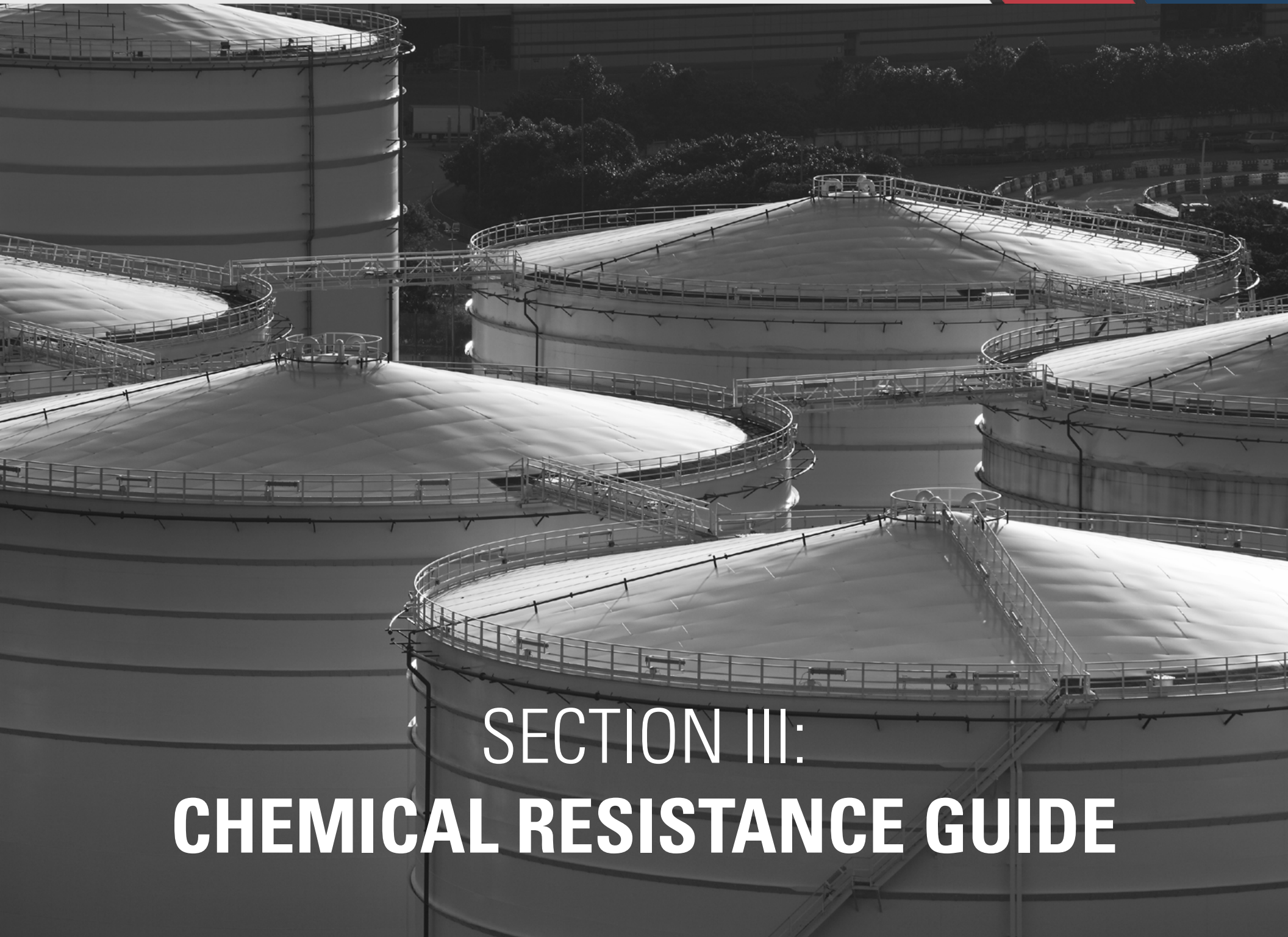
Refinery Tank Lining Guide

Service Type	Tank Lining	Film Thickness*
Crude Oil	GripLine 6200 100% Solids Epoxy	20 – 30 mils
Gasoline	GripLine 6500 100% Solids Novolac	30 – 40 mils
Aviation Gas	GripLine 6500 100% Solids Novolac	30 – 50 mils
Jet Fuel	GripLine 6510 100% Novolac Glass-Flake	30 – 50 mils
Sour Crude	GripLine 6500 100% Solids Novolac	30 – 40 mils
Diesel Fuel	GripLine 6200 100% Solids Epoxy	30 – 40 mils
Fuel Oil	GripLine 6200 100% Solids Epoxy	30 – 40 mils
Gasohol	GripLine 6500 100% Solids Novolac	40 – 50 mils
Kerosene	GripLine 6200 100% Solids Epoxy	30 – 40 mils
Naphtha	GripLine 6500 100% Solids Novolac	60 mils
Heavy Naphtha	GripLine 6310-S Glass-Flake Vinyl Ester	60 mils
Propane	GripLine 6510 100% Solids Novolac Flake-Filled	40 mils
Caustic	Grip-Line 6300-S Vinyl Ester	40 – 60 mils
Sulfuric Acid	GripLine 6510 100% Solids Novolac Flake-Filled	60 mils
Sour Water	GripLine 6310-T Trowel Glass-Flake Vinyl Ester	120 mils

* Typical thickness for tank lining. Final thickness recommendation to be determined by tank owner.

Exposure	GL6000	GL6100	GL6110	GL6130	GL6200	GL6210	GL6220	GL6300-G	GL6300-S
Crude Oil		•			•		•	•	•
Gasoline		•							•
Sour Water									
Potable Water									
Waste Water			•		•		•	•	
Spent Acid									
Solvents		•	•						
Lime Slurry								•	
HD Stock								•	•
Demin Water		•							
Caustic									
Sulfuric Acid	•								
Food Products	•			•		•			•
Stock Chests								•	•
FGD Scrubbers								•	•
Hot Water									
Wine, Beer									
CUI			•						
Ballasts		•		•	•		•		

Exposure	GL6300-T	GL6310-S	GL6310-T	GL6400	GL6450	GL6500	GL6510	GL6520	GL6700
Crude Oil							•		
Gasoline							•		
Sour Water	•	•	•						
Potable Water				•	•				
Waste Water	•	•	•				•		
Spent Acid	•	•	•				•		•
Solvents									•
Lime Slurry	•	•	•						
HD Stock	•	•	•						
Demin Water	•	•	•						
Caustic	•	•				•		•	
Sulfuric Acid	•	•					•		
Food Products					•				•
Stock Chests	•	•	•						
FGD Scrubbers		•	•						
Hot Water						•	•	•	
Wine, Beer									•
CUI		•	•			•	•	•	
Ballasts	•			•	•		•		



SECTION III:
CHEMICAL RESISTANCE GUIDE

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Acetic Acid	5	75	OK	OK (X30)	OK(X30)	NR	OK	OK	OK	OK	NR
Acetone	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Adipic Acid	100	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Alkyl Benzene (C12+)	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Alkyl Glycidyl Ether	100	150	OK	OK	OK	NR	NR	NR	NR	NR	OK
Aluminum Chloride	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Aluminum Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Aluminum Fluoride	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Aluminum Fluoride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Aluminum Sulfate	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Aluminum Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Alum	15	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Carbonate	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Carbonate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ammonium Chloride	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ammonium Hydroxide	5	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Nitrate	30	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Nitrate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Ammonium Sulfate	30	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Ammonium Sulfide	30	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ammonium Sulfide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Amyl Acetate	100	75	OK	OK	OK	NR	NR	NR	NR	NR	NR
Barium Chloride	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Barium Hydroxide	50	75	OK	OK	OK	NR	NR	NR	NR	NR	NR
Barium Hydroxide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Barium Nitrate	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Barium Nitrate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Benzaldehyde	100	75	OK	NR	NR	NR	NR	NR	NR	NR	NR
Benzene	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Bleach, i.e. Sodium Hypochlorite	5	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Boric Acid	25	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Boric Acid	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Butyl Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Butyl Alcohol	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Calcium Bromide	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Calcium Bromide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Calcium Chloride	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Calcium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Calcium Hydroxide	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Calcium Hydroxide	Dry	150	NR	OK	OK	OK	OK	OK	OK	OK	NR
Calcium Sulfate	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Calcium Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Calcium Sulfide	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Calcium Sulfide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Carbon Tetrachloride (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Castor Oil	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Cellosolve	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Cellosolve Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Citric Acid	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Citric Acid	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Coconut Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Copper Chloride	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Copper Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Copper Sulfate	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Copper Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Cottonseed Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Cresol	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Crude Oil	100	100	OK	OK	OK	NR	OK	OK	OK	OK	OK
Cumene	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Cyclohexane	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Cyclohexanol	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Cyclohexanone	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
DI Water	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Dextrin	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Dextrose	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Diacetone Alcohol	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Dichlorobenzene (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Dichloroethylene (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Dichloroethane (Ethylene Dichloride) (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Dicyclopentadiene	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Diesel Fuel	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Diethanolamine (DEA) (4)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Diethyl Amine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Diethylene Glycol	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dimethylacetamide (3)	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Dimethylaniline, i.e. Xylidine	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Dimethyl Ether	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Dimethylethylamine, i.e. Methyl Ethyl Amine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Dimethylethanolamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
DMF Dimethyl Formamide	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Dimethyl Phthlate	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Dimethyl Polysilicone, i.e. Silicone Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Dioctyl Phthlate (3)	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Dioxane	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Diphenyl	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Disodium Phosphate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Dodecylbenzenesulfonic Acid – Sodium Salt	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Epichlorhydrin (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Epsom Salts	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ethanol, i.e. Alcohol Ethyl	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Ethanolamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Ethyl Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Ethyl Acrylate (4, 5)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Ethyl Alcohol, i.e. Alcohol Ethyl	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Ethyl Benzene	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Ethyl Bromide (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Ethyl Chloride (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Ethyl Ether	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
2-Ethyl Hexanol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Ethylene Chloride (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Ethylene Dichloride, i.e. EDC or Dichloroethane (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Ethylene Glycol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Ethylene Oxide	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
2-Ethyl Butanol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Ethyl Hexylamine (4)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Ferric Chloride	>96	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ferric Sulfate	<50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ferrous Chloride	Saturated	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Ferrous Sulfate	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Fluorosilicic Acid	Dry	150	NR	NR	NR	NR	OK	OK	NR	NR	NR
Formaldehyde	35	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Formic Acid	10	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Formic Acid	100	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Fructose	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Fuel Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Gasoline – unleaded with MTBE	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Gasoline – regular ethyl	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Glucose	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Glycerol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Glycols (C6+)	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Grease	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Heptane	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Hexamethylene Bromide (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Hexamethylenediamine (4)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Hexane	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
1-Hexanol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Hydraulic Oils – Petroleum	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Hydraulic Oils – Synthetic	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Hydrochloric Acid	ALL	75	OK (6)	NR	NR	NR	OK	OK	OK	OK	NR
Hydrofluoric Acid	ALL	75	OK (6)	NR	NR	NR	OK	OK	NR	NR	NR
Hydrofluosilic Acid	ALL	75	OK (6)	NR	NR	NR	OK	OK	NR	NR	NR
Hydrogen Peroxide	3	75	OK	OK (X30)	OK(X30)	NR	OK	OK	OK	OK	NR
Hydrogen Peroxide	30	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Iodine (2)	5	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Iron Chloride	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Iron Sulfate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Isobutanol	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Isooctanol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Isophorone	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Isobutyl Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Isopropanol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Isopropyl Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Isopropyl Ether	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Jet Fuel, Jet A, JP3, 4, 5	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Kerosene	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Lead Acetate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Lead Nitrate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Lead Sulfate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Lead Sulfite	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Linseed Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Lithium Bromide	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Lithium Chloride	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Lithium Hydroxide	10	75	OK	OK	OK	NR	OK	OK	OK	OK	NR

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Lithium Sulfate	10	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Magnesium Carbonate (3)	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Magnesium Chloride	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Magnesium Chloride	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Magnesium Hydroxide	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Magnesium Sulfate, i.e. Epsom Salts	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Maleic Acid	50	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Maleic Anhydride	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Mercaptans	100	75	OK	NR	NR	NR	NR	NR	NR	NR	NR
Methanesulfonic Acid	<50	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Methanol, Alcohol Methyl	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methylacrylic Acid, i.e. Methacrylic or Crotonic Acid (5)	100	75	NR	NR	NR	NR	OK	OK	OK	OK	NR
Methyl Alcohol, i.e. Alcohol Methyl	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Bromide (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Butadiene (5)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Butanol	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Cellosolve Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Chloride	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Diethanolamine, i.e. MDEA (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Ethyl Amine, i.e. MEA (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Methyl Ethyl Ketone, i.e. MEK	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Isobutyl Carbinol	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methyl Isobutyl Ketone	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Methylamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Methylene Chloride (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Methylsulfuric Acid	100	75	NR	NR	NR	NR	OK	OK	OK	OK	NR
Methyl t-Butyl Ether, i.e. MTBE	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Mineral Oils	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Mineral Spirits, i.e. Petroleum Naptha	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Monochlorobenzene (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Monoethanolamine, i.e. MEA (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Motor Oil – Conventional	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Motor Oil – Synthetic (3)	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
MTBE, i.e. Methyl t-Butyl Ether	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Naptha	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Napthalene	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Natural Gas Condensate	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Nitric Acid	>50	75	NR (6)	NR	NR	NR	OK	OK	OK	OK	NR
Nitrobenzene (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Nonyl Phenol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Oil, Fuel	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Oils, Petroleum Refined	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Oils, Petroleum Sour	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Oils, Water Mixture	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Oleic Acid	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Oxalic Acid	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Palmitic Acid	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Paraffin Oils	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Paraffin Wax	Dry	200	NR	NR	OK	NR	OK	OK	OK	OK	OK
1-Pentanol	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Perchloric Acid	10	75	NR	NR	NR	NR	OK	OK	OK	OK	NR
Perchloroethylene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Petrolatum	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Petroleum Ether	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Phenol (Carbolic Acid) (4)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Phosphoric Acid	<85	75	OK (6)	NR	NR	NR	OK	OK	OK	OK	NR
Phthalic Anhydride (3)	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Polyester Resins (5)	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Polyester Resins Styrenated	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Potassium Acetate (Deicer Fluid)	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Potassium Bicarbonate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Potassium Carbonate, i.e. Potash	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Potassium Chloride	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Potassium Hydroxide, i.e. Caustic Potash	<70	NR	NR	NR	NR	NR	OK	OK	OK	OK	NR
Potassium Nitrate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Potassium Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Propane	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Propionaldehyde	100	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Propionic Acid	100	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Propyl Acetate (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Propyl Benzene	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Propylene Glycol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Propylene Oxide	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Soda Ash, i.e. Sodium Carbonate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Sodium Acetate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Aluminate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Sodium Bicarbonate	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Bicarbonate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Sodium Bisulfite, i.e. Sulfite Liquor	<50	75	OK	OK (X30)	OK(X30)	NR	OK	OK	OK	OK	NR
Sodium Bromide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Sodium Chlorate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	NR
Sodium Chlorite	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Cyanide	20	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Cyanide	Dry	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Hydroxide, i.e. Caustic Soda	10-20	75	OK	OK	NR	NR	OK	OK	NR	NR	NR
Sodium Hydroxide	>51	75	NR	NR	NR	NR	OK	OK	NR	NR	NR
Sodium Hydchlorite, i.e. Bleach	5	75	OK	NR							NR
Sodium Hypochlorite	<20	75	NR	NR	NR	NR	OK	OK	OK	OK	NR
Sodium Hypochlorite	Conc.	75	NR	NR	NR	NR	OK	OK	OK	OK	NR
Sodium Nitrate	Dry	150	OK	OK							NR

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Sodium Nitrite	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Phosphate (Mono Base)	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Phosphate (Disodium Hydrogen Phosphate)	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Phosphate (Trisodium Phosphate)	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Hexametaphosphate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Silicate, i.e. Water Glass	<5	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Sulfate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Sulfide	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Sulfite	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Sodium Thiosulfate	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Stearic Acid	Dry	100	OK	OK	OK	NR	OK	OK	OK	OK	NR
Styrene (5)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Styrene Oxide (5)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Sulfamic Acid	99.5	75	NR	NR	NR	NR	OK	OK	OK	OK	NR
Sulfuric Acid (2)	<10	75	OK (6)	OK (N30)	OK(X30)	NR	OK	OK	OK	OK	NR
Sulfuric Acid (2)	11-92	75	OK (6)	NR	NR	NR	OK	OK	OK	OK	NR
Sulfuric Acid (2)	93-98	130	OK	NR	NR	NR	NR	NR	NR	NR	NR
Stoddard Solvent, i.e. Mineral Spirits	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Tannic Acid	Dry	100	OK	NR	NR	NR	OK	OK	OK	OK	OK
Tartaric Acid	10	75	OK	NR	NR	NR	OK	OK	OK	OK	NR
Tetrachlorethane (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Tetrahydrofuran	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Toluene	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Transformer Oil	100	75	OK	OK							NR

Chemical Resistance Guide – Chart I

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6000	GripLine 6100	GripLine 6110	GripLine 6130	GripLine 6300-S	GripLine 6300-T	GripLine 6310-S	GripLine 6310-T	ZincGard 1000
Trichloroethane (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Trichloroethylene (3)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	OK
Tridecanol	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Triethanolamine (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Triethylamine (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Triethylene Glycol	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Trimethylamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Trimethylbenzene	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Trisodium Phosphate	Saturated	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Turpentine	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Urea	50	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Urea	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	NR
Vinegar	5	75	OK	OK (X30)	OK(X30)	NR	OK	OK	OK	OK	NR
Vinyl Acetate (3, 5)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl Chloride (5)	100	75	OK	NR	NR	NR	NR	NR	NR	NR	NR
Water, Deionized	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Water, Potable	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Xylene, i.e. Xylol	100	75	OK	OK	OK	NR	NR	NR	NR	NR	OK
Zinc Bromide	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Zinc Chloride	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR
Zinc Sulfate	100	75	OK	OK	OK	NR	OK	OK	OK	OK	NR

1 = Coating Softening
2 = Coating Discoloration
3 = Product must be dry. Presence of moisture will cause hydrolysis of chemical, which will react with zinc rich coating systems.
4 = Must be kept dry.
5 = Contamination may cause product polymerization.
6 = Due to the high corrosion rate of steel in this exposure, coating is not recommended even though the coating is resistant.
X30 = Limited to 30 day exposure.

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Acetic Acid	5	75	OK (X30)	OK(X30)	OK (X30)	NR	NR(X30)	OK	OK	OK	OK (X30)
Acetone	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Adipic Acid	100	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Alkyl Benzene (C12+)	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK	OK	OK	OK
Alkyl Glycidyl Ether	100	150	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK	OK	OK	OK
Aluminum Chloride	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Aluminum Chloride	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Aluminum Fluoride	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Aluminum Fluoride	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Aluminum Sulfate	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Aluminum Sulfate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Alum	15	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Carbonate	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Carbonate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ammonium Chloride	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ammonium Hydroxide	5	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Nitrate	30	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Nitrate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ammonium Sulfate	30	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ammonium Sulfide	30	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ammonium Sulfide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Amyl Acetate	100	75	NR	NR	NR	NR	NR	OK	OK	OK	OK
Barium Chloride	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Barium Hydroxide	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Barium Hydroxide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Barium Nitrate	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Barium Nitrate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Benzaldehyde	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Benzene	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bleach, i.e. Sodium Hypochlorite	5	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Boric Acid	25	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Boric Acid	Dry	150	OK	OK	NR	OK	OK	OK	OK	OK	OK
Butyl Acetate (3)	100	75	OK(X30)	OK(X30)	OK(X30)	NR	NR	OK(X30)	OK(X30)	OK(X30)	OK(X30)
Butyl Alcohol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Calcium Bromide	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Calcium Bromide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Calcium Chloride	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Calcium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Calcium Hydroxide	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Calcium Hydroxide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Calcium Sulfate	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Calcium Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Calcium Sulfide	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Calcium Sulfide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Carbon Tetrachloride (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Castor Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Cellosolve	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Cellosolve Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Citric Acid	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Citric Acid	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Coconut Oil	100	75	OK	0K	OK	NR	OK	OK	OK	OK	OK
Copper Chloride	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Copper Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Copper Sulfate	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Copper Sulfate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Cottonseed Oil	100	75	OK	OK	OK	NR	OK	OK	OK	OK	OK
Cresol	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Crude Oil	100	100	OK	OK	OK	NR	NR	OK	OK	OK	OK
Cumene	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK	OK	OK	OK
Cyclohexane	100	75	OK (X30)	OK(X30)	OK(X30)	NR	NR	OK (X30)	OK(X30)	OK (X30)	OK (X30)
Cyclohexanol	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK (X30)	OK(X30)	OK (X30)	OK (X30)
Cyclohexanone	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
DI Water	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dextrin	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dextrose	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Diacetone Alcohol	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dichlorobenzene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dichloroethylene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dichloroethane (Ethylene Dichloride) (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dicyclopentadiene	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK(X30)	OK(X30)	OK(X30)	OK(X30)
Diesel Fuel	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Diethanolamine (DEA) (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Diethyl Amine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Diethylene Glycol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Dimethylacetamide (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	OK
Dimethylaniline, i.e. Xylidine	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dimethyl Ether	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dimethylethylamine, i.e. Methyl Ethyl Amine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Dimethylethanolamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
DMF Dimethyl Formamide	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dimethyl Phthlate	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dimethyl Polysilicone, i.e. Silicone Oil	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dioctyl Phthlate (3)	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dioxane	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Diphenyl	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Disodium Phosphate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Dodecylbenzenesulfonic Acid – Sodium Salt	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Epichlorhydrin (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Epsom Salts	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ethanol, i.e. Alcohol Ethyl	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ethanolamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl Acrylate (4, 5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl Alcohol, i.e. Alcohol Ethyl	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ethyl Benzene	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl Bromide (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl Chloride (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl Ether	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Ethyl Hexanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ethylene Chloride (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylene Dichloride, i.e. EDC or Dichloroethane (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Ethylene Glycol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ethylene Oxide	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Ethyl Butanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ethyl Hexylamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ferric Chloride	>96	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ferric Sulfate	<50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ferrous Chloride	Saturated	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Ferrous Sulfate	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Fluorosilicic Acid	Dry	150	NR	NR	NR	NR	NR	NR	NR	NR	NR
Formaldehyde	35	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Formic Acid	10	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Formic Acid	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Fructose	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Fuel Oil	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Gasoline – unleaded with MTBE	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Gasoline – regular ethyl	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Glucose	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Glycerol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Glycols (C6+)	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Grease	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Heptane	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Hexamethylene Bromide	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexamethylenediamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hexane	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
1-Hexanol	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Hydraulic Oils – Petroleum	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Hydraulic Oils – Synthetic	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Hydrochloric Acid	ALL	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hydrofluoric Acid	ALL	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hydrofluosilic Acid	ALL	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hydrogen Peroxide	3	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hydrogen Peroxide	30	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Iodine (2)	5	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Iron Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Iron Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Isobutanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Isooctanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Isophorone	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Isobutyl Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Isopropanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Isopropyl Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Isopropyl Ether	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Jet Fuel, Jet A, JP3, 4, 5	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Kerosene	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Lead Acetate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lead Nitrate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lead Sulfate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lead Sulfite	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Linseed Oil	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lithium Bromide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lithium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lithium Hydroxide	10	75	OK	OK	OK	NR	NR	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Lithium Sulfate	10	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Magnesium Carbonate (3)	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Magnesium Chloride	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Magnesium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Magnesium Hydroxide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Magnesium Sulfate, i.e. Epsom Salts	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Maleic Acid	50	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Maleic Anhydride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Mercaptans	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methanesulfonic Acid	<50	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methanol, Alcohol Methyl	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK (X30)	OK(X30)	OK (X30)	OK (X30)
Methyl Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylacrylic Acid, i.e. Methacrylic or Crotonic Acid (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Alcohol, i.e. Alcohol Methyl	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK (X30)	OK(X30)	OK (X30)	OK (X30)
Methyl Bromide (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Butadiene (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Butanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Methyl Cellosolve Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Chloride	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Diethanolamine, i.e. MDEA (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Ethyl Amine, i.e. MEA (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Methyl Ethyl Ketone, i.e. MEK	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Isobutyl Carbinol	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Isobutyl Ketone	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene Chloride (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylsulfuric Acid	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl t-Butyl Ether, i.e. MTBE	100	75	OK(X30)	OK(X30)	OK(X30)	NR	NR	OK (X30)	OK(X30)	OK (X30)	OK (X30)
Mineral Oils	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Mineral Spirits, i.e. Petroleum Naptha	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Monochlorobenzene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Monoethanolamine, i.e. MEA (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Motor Oil – Conventional	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Motor Oil – Synthetic (3)	100	75	NR	OK	OK	OK	OK	OK	OK	OK	OK
MTBE, i.e. Methyl t-Butyl Ether	100	75	OK(X30)	OK(X30)	OK(X30)	NR	NR	OK (X30)	OK(X30)	OK (X30)	OK (X30)
Naptha	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Napthalene	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Natural Gas Condensate	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Nitric Acid	>50	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Nitrobenzene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Nonyl Phenol	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK	OK	OK	OK
Oil, Fuel	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Oils, Petroleum Refined	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Oils, Petroleum Sour	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Oils, Water Mixture	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Oleic Acid	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Oxalic Acid	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Palmitic Acid	Dry	150	OK	OK	OK	NR	OK	OK	OK	OK	OK
Paraffin Oils	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Paraffin Wax	Dry	200	OK	OK	OK	NR	NR	OK	OK	OK	OK
1-Pentanol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Perchloric Acid	10	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Perchloroethylene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Petrolatum	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Petroleum Ether	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Phenol (Carbolic Acid) (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Phosphoric Acid	<85	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Phthalic Anhydride (3)	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Polyester Resins (5)	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Polyester Resins Styrenated	100	75	OK	OK	OK	NR	NR	OK	NR	OK	OK
Potassium Acetate (Deicer Fluid)	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Potassium Bicarbonate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Potassium Carbonate, i.e. Potash	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Potassium Chloride	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Potassium Hydroxide, i.e. Caustic Potash	<70	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Potassium Nitrate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Potassium Sulfate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Propane	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Propionaldehyde	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Propionic Acid	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Propyl Acetate (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Propyl Benzene	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Propylene Glycol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Propylene Oxide	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Soda Ash, i.e. Sodium Carbonate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Acetate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Aluminate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Bicarbonate	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Bicarbonate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Bisulfite, i.e. Sulfite Liquor	<50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Bromide	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Chlorate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Chloride	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Chlorite	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Cyanide	20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Cyanide	Dry	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Hydroxide, i.e. Caustic Soda	10-20	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Hydroxide	>51	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sodium Hydchlorite, i.e. Bleach	5	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sodium Hypochlorite	<20	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sodium Hypochlorite	Conc.	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sodium Nitrate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK

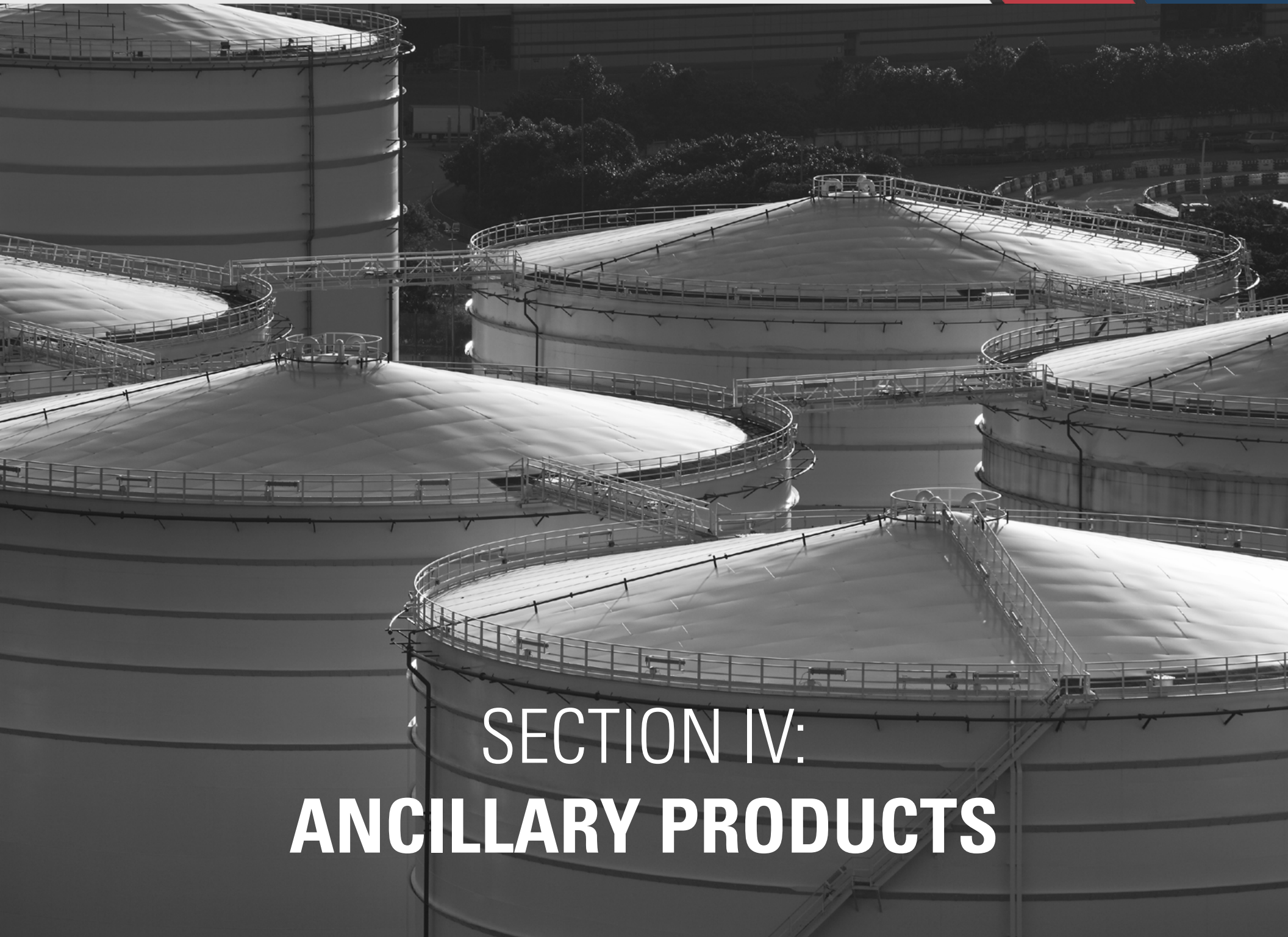
Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Sodium Nitrite	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Phosphate (Mono Base)	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Phosphate (Disodium Hydrogen Phosphate)	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Phosphate (Trisodium Phosphate)	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Hexametaphosphate	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Sodium Silicate, i.e. Water Glass	<5	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Sulfate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Sulfide	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Sulfite	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Sodium Thiosulfate	Dry	150	OK	OK	OK	NR	NR	OK	OK	OK	OK
Stearic Acid	Dry	100	OK	OK	OK	NR	NR	OK	OK	OK	OK
Styrene (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Styrene Oxide (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sulfamic Acid	99.5	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sulfuric Acid (2)	<10	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK	OK	OK (X30)	OK (X30)
Sulfuric Acid (2)	11-92	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sulfuric Acid (2)	93-98	130	NR	NR	NR	NR	NR	NR	NR	NR	NR
Stoddard Solvent, i.e. Mineral Spirits	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Tannic Acid	Dry	100	OK	OK	OK	NR	NR	OK	OK	OK	NR
Tartaric Acid	10	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Tetrachlorethane (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Tetrahydrofuran	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Toluene	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Transformer Oil	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK

Chemical Resistance Guide – Chart II

CHEMICAL EXPOSURE	% Conc.	Temp (F)	GripLine 6200	GripLine 6210	GripLine 6220	GripLine 6400	GripLine 6450	GripLine 6500	GripLine 6510	GripLine 6520	GripLine 6700
Trichloroethane (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Trichloroethylene (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Tridecanol	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK(X30)	OK(X30)	0K(X30)	OK(X30)
Triethanolamine (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Triethylamine (3)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Triethylene Glycol	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Trimethylamine (4)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Trimethylbenzene	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Trisodium Phosphate	Saturated	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Turpentine	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Urea	50	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Urea	Dry	150	OK	OK	OK	OK	OK	OK	OK	OK	OK
Vinegar	5	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Vinyl Acetate (3, 5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl Chloride (5)	100	75	NR	NR	NR	NR	NR	NR	NR	NR	NR
Water, Deionized	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Water, Potable	100	75	OK	OK	OK	OK	OK	OK	OK	OK	OK
Xylene, i.e. Xylol	100	75	OK (X30)	OK(X30)	OK (X30)	NR	NR	OK(X30)	OK(X30)	OK(X30)	OK(X30)
Zinc Bromide	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Zinc Chloride	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK
Zinc Sulfate	100	75	OK	OK	OK	NR	NR	OK	OK	OK	OK

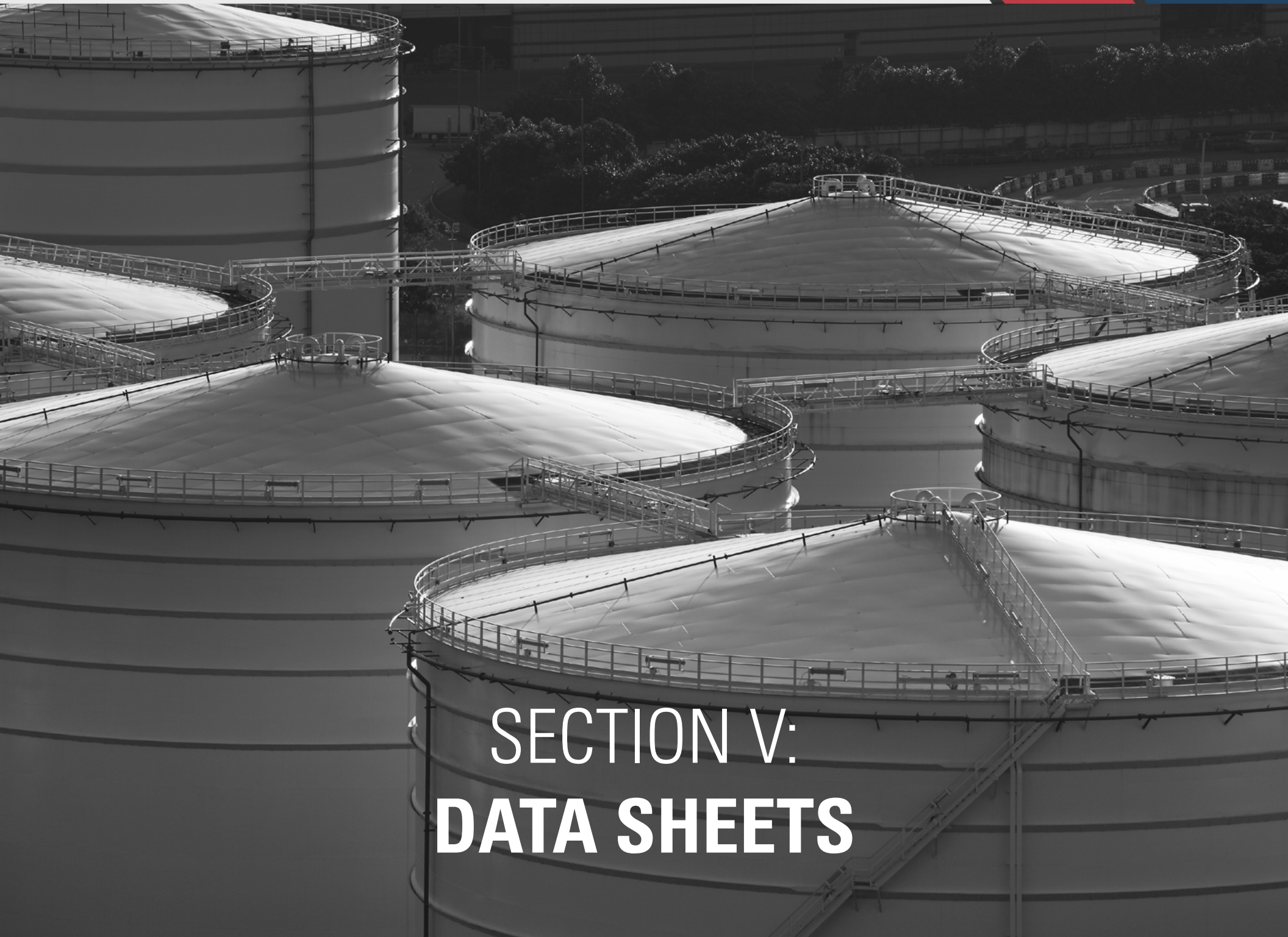
1 = Coating Softening
2 = Coating Discoloration
3 = Product must be dry. Presence of moisture will cause hydrolysis of chemical, which will react with zinc rich coating systems.
4 = Must be kept dry.
5 = Contamination may cause product polymerization.
6 = Due to the high corrosion rate of steel in this exposure, coating is not recommended even though the coating is resistant.
X30 = Limited to 30 day exposure.



SECTION IV:
ANCILLARY PRODUCTS

Systems/Ancillary Products

Product Name	Generic Description
GripLine Putty	Epoxy putty filler for steel or concrete substrates
GripLine Filler	Vinyl ester putty filler for steel or concrete substrates
GripLine 6200 Primer	Epoxy primer for steel or concrete
GripLine 6300 Primer	Vinyl ester primer for steel or concrete
VersaCaulk	Flexible urethane caulk
GripLine Mat	1.5 oz. chopped strand mat
GripLine Scrim	60 mil engineering fabric



SECTION V:
DATA SHEETS

GripLine 6000

High Bake Modified Phenolic Tank Lining

Features

- FDA compliant
- Waterbased – Nonflamable
- Excellent high temperature resistance
- Excellent acid resistance
- Excellent chemical resistance
- Very low VOC
- High solids formulation
- Excellent abrasion resistance
- Self priming
- Excellent high pressure resistance

Typical Uses

GripLine 6000 is a self priming, multiple or single coat, thin film, high bake modified phenolic for immersion service. GripLine 6000 is specifically used as a tank lining for 90% to 98% sulfuric acid service as well as other aggressive chemical exposures as recommended. Used to line steel tanks, reactors, rail tank cars and truck tankers requiring a high degree of chemical resistance. GripLine 6000 is FDA compliant for direct food contact.

Physical Data

Abrasion resistance (ASTM D 4060)	
1 kg load/1000 cycles (ASTM D 4060)	weight loss
CS 17 wheel	34 mg
Impact resistance (ASTM D 2794)	
Direct impact	80 in-lbs.
Adhesion (ASTM D 4541)	600 psi
Temperature resistance:	
(varies with immersion exposure)	
Continuous	250°F
Non-continuous	400°F
Conversion Rate of mixed material:	
(based on true applied conversion rate, wet film to dry film)	**75%±1%**
*Tested in accordance with TNCRR procedures	
Theoretical coverage of mixed gallon (1 mil)	1203 sq. ft.
Volatile Organic Content	
Unthinned	0.75 lbs./gal.
Potable water @ 1fl. oz./gal .	0.75 lbs./gal.

Resistance

GripLine 6000 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion
Acids	Excellent
Alkaline	Excellent
Solvents	Good
Salt water	Excellent
194°F Water	Excellent

Note: Consult U.S. Coatings lining guide and technical service for specific recommendations.

Film Thickness (per coat)

Dry film thickness: 2 to 3.5 mils
Wet film thickness: 3 to 5 mils
Theoretical coverage: 401 sq. ft. @ 3 mils DFT

Primer/Substrates

GripLine 6000 is applied directly to properly prepared steel as recommended.

Topcoats

GripLine 6000 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6000 is available in ivory that changes to chocolate brown upon baking.

Shipping Data

Packaging unit	5 gal.
Base	5 gal.
Converter	(Pre-measured) 4 fl. oz. (approx)
Shipping weight (approx.)	
Package unit	70 lbs.
Flash Point: (Setaflash)	
Base	> 200°F
Converter	98°F

Shelf Life: 5 months for both the base and the converter when stored inside at 40°F

GripLine 6000

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 1.5 – 2 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	5 Gal. Kit
GripLine 6000 Base	5 gallon
GripLine 6000 Converter	(Pre-measured) 4 fl. oz. (approx)

Thinning

For optimum results, precondition GripLine 6000 to 110°F. At this temperature, thinning is not normally required. GripLine 6000 may be thinned up to 4 fl. oz/gal. with potable water.
Notes: GripLine 6000 viscosity drops rapidly with addition of small amounts of potable water or heat. GripLine 6000 viscosity reduces rapidly as the liquid material temperature rises.

Pot Life

Six hours at 75° and less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	68°F	50°F	50°F
Maximum	80°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and a .015" to .019" tip is recommended. A 30 mesh inline filter is recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.
Note: Use dedicated spray lines to apply this product. Use of spray lines that have been previously used to apply epoxies or urethanes will result in the previous coating stripping out of the lines. This will result in excessive tip plugging, contamination and holidays in the final film.

Cure Schedule

The following minimum times are based on two coats at 3 mils DFT per coat, 6 mils total DFT, and proper air ventilation. Ventilate for 30 minutes prior to heating.

Coating Sequence	Intermediate Bake Time/Temp	Final Bake Time/Temp
First Coat	1.5 hours @ 200 - 230°F	
Second Coat	35 minutes @ 200 - 230°F	
Second Coat		1.5 hours @ 440°F to 470°F

Maximum Recoat

All holiday detection and touch up should be conducted after the 2nd coat application and intermediate bake has been completed and prior to the final bake. GripLine 6000 cannot be recoated or touched up after the final bake.

Cleanup

Cleanup with potable water, followed by a final rinse with MEK. Pre-wet spray lines with potable water prior to charging the lines with GripLine 6000.

Rev. 1/31/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6100

Novolac Epoxy Tank Lining

Features

- Excellent chemical resistance
- Semi-gloss finish
- VOC compliant
- High solids formulation
- Excellent build on edges
- Ambient temperature cure
- Blush resistant during cure
- Easy to apply

Typical Uses

GripLine 6100 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel tanks and to coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills and other areas as recommended.

Physical Data

Abrasion resistance (ASTM D 4060)	
1 kg load/1000 cycles (ASTM D 4060)	weight loss
CS 17 wheel	60 mg
Impact resistance (ASTM D 2794)	
Direct impact	80 in-lbs.
Adhesion (ASTM D 4541)	4405psi
Temperature resistance (non-immersion):	
Continuous	250°F
Non-continuous	300°F
Theoretical volumes solids of mixed material	72% +/-1%
Theoretical coverage of mixed gallon (1 mil)	1155 sq. ft.
Volatile Organic Content	
Unthinned	2.0 lbs./gal.
Reducer 3 @ 1 pint/gal.	2.6 lbs./gal.

Resistance

GripLine 6100 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash& Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 4 to 6 mils
Wet film thickness: 5 to 9 mils
Theoretical coverage: 231 sq. ft. @ 5 mils DFT

Substrates

GripLine 6100 is applied directly to steel as recommended.

Topcoats

GripLine 6100 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6100 is available in brick red and medium gray. Normally the red is used as the primer to provide color contrast with the steel surface and gray topcoat.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	0.8 gal.	4 gal.
Converter	0.2 gal.	1 gal.
Shipping weight (approx.)		
Package unit	13 lbs.	65 lbs.
	1 gal.	5 gal.
Reducer 3	8 lbs.	40 lbs.
Flash Point: (Setaflash)		
Base	21°F	
Converter	40°F	
Reducer 3	81°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6100

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.

Steel:

I**mmersion Service:** Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 1.5 – 3 mil anchor profile.

Non-Immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 1.5 – 3 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6100 Base	.8 gallon	4 gallon
GripLine 6100 Converter	.2 gallon	1 gallon

Thinning

Thinning is not required for most applications; however, GripLine 6100 may be thinned up to 1 pint/gal. with Reducer 3.

Pot Life

Two hours at 75° and less at higher temperatures. Pot life ends by the loss of film build.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	90°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8" I.D. minimum material hose and .070" I.D. fluid tip and air cap are recommended.

Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and a .017" to .021" tip is recommended. A 30 mesh inline filter is recommended.

Power Mixer: Use only explosion proof power mixers.

Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 5 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase dryimg times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	6 hrs.	48 hrs.	14 days
70°F	3 hrs.	24 hrs.	7 days
80°F	2 hrs.	12 hrs.	4 days

Maximum Recoat

Surface Temperature	Days
50°F	30
75°F	15
90°F	7

Cleanup

Cleanup with Reducer 3.

Rev. 1/31/14

CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.

CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.

HEALTH: In confined spaces workers must wear fresh airline respirators.

WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6110

Glass Flake Novolac Epoxy Tank Lining

Features

- Excellent chemical resistance
- Semi-gloss finish
- VOC compliant
- High solids formulation
- Excellent build on edges
- Ambient temperature cure
- Blush resistant during cure
- Easy to apply

Typical Uses

GripLine 61100 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel tanks and to coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended.

Physical Data

Abrasion resistance (ASTM D 4060)	
1 kg load/1000 cycles (ASTM D 4060)	weight loss
CS 17 wheel	60 mg
Impact resistance (ASTM D 2794)	
Direct impact	80 in-lbs.
Adhesion (ASTM D 4541)	4405 psi
Temperature resistance (non-immersion)	
Continuous	250°F
Non-continuous	300°F
Theoretical volume solids of mixed material	72%±1%
Theoretical coverage of mixed gallon (1 mil)	1155 sq. ft.
Volatile Organic Content	
Unthinned	2.0 lbs./gal.
Reducer 3 @ 1 pint/gal.	2.6 lbs./gal.

Resistance

GripLine 6100 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 8 to 10 mils
Wet film thickness: 11 to 13 mils
Theoretical coverage: 144 sq. ft. @ 8 mils DFT

Substrates

GripLine 6110 is applied directly to steel as recommended.

Topcoats

GripLine 6110 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6110 is available in brick red and medium gray. Normally the red is used as the primer to provide color contrast with the steel surface and gray topcoat.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	0.8 gal.	4 gal.
Converter	0.2 gal.	1 gal.
Shipping weight (approx.)		
Package unit	13 lbs.	65 lbs.
	1 gal.	5 gal.
Reducer 3	8 lbs.	40 lbs.
Flash Point: (Setaflash)		
Base	21°F	
Converter	40°F	
Reducer 3	81°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6110

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 1.5 – 3 mil anchor profile.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 1.5 – 3 mil anchor profile

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6110 Base	.8 gallon	4 gallon
GripLine 6100 Converter	.2 gallon	1 gallon

Thinning

Thinning is not required for most applications; however, GripLine 6110 may be thinned up to 1 pint/gal. with Reducer 3.

Pot Life

Two hours at 75° and less at higher temperatures. Pot-life ends by the loss of film build.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°
Maximum	90°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio or greater and a .035" tip is recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 5 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	6 hrs.	48 hrs.	14 days
70°F	3 hrs.	24 hrs.	7 day
80°F	2 hrs.	12 hrs.	4 days
90°F	1 hr.	6 hrs.	2 days

Maximum Recoat

Surface Temperature	Days
50°F	30
75°F	15
90°F	7

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 3.

Rev. 1/31/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
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HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6130

Epoxy Tank Lining

Features

- Excellent water resistance
- Semi-gloss finish
- VOC compliant
- High solids formulation
- Excellent build on edges
- Rapid and extended recoat windows
- Single coat capability
- Excellent wetting and adhesion properties
- Good chemical resistance
- Easy spray application

Typical Uses

GripLine 6130 is used as a general service tank lining. It is used to line non-potable water tanks, ballasts, dry bulk-storage tanks and general service tanks in refineries, power plants, chemical plants, barges, pulp & paper mills and other areas as recommended.

Qualifications

Exceed requirements of SSPC Paint 22 performance requirements.

Performance Data

Salt Spray (ASTM B 117) 1000 hours
Plane blistering or rusting: none

Physical Data

Abrasion resistance (ASTM D 4060)	
1 kg load/1000 cycles (ASTM D 4060)	weight loss
CS 17 wheel	22 mg
Impact resistance (ASTM D 2794)	
Direct impact	80 in-lbs.
Adhesion (ASTM D 4541)	4031 psi
Temperature resistance (non-immersion)	
Continuous	250°F
Non-continuous	300°F
Theoretical volume solids of mixed material	80%±1%
Theoretical coverage of mixed gallon (1 mil)	1283 sq. ft.
Volatile Organic Content	
Unthinned	1.44 lbs./gal.
Reducer 3 @ 1 pint/gal.	2.04 lbs./gal.

Resistance

GripLine 6130 is resistant to a wide range of chemicals in atmospheric exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Not recommended	Good	Good
Alkaline	Not recommended	Excellent	Excellent
Solvents	Not recommended	Good	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 4 to 6 mils
Wet film thickness: 5 to 9 mils
Theoretical coverage: 257 sq. ft.@ 5 mils DFT
Note: One coat is normally required; however, certain colors may require additional coats for hiding.

Primer/Substrates

GripLine 6130 can be applied directly to steel or concrete as recommended.

Topcoats

GripLine 6130 is not intended for exterior use and will chalk if exposed to UV. GripLine 6130 may be topcoated with itself or other epoxies as recommended.

Colors

GripLine 6130 is available in white, gray and tile red. Custom colors are available upon request.

Shipping Data

Packaging unit	2 gal.	10 gal.
Base	1 gal.	5 gal.
Converter	1 gal.	5 gal.
Shipping weight (approx.)		
Package unit	28 lbs.	140 lbs.
	1 gal.	5 gal.
Reducer 3	9 lbs.	45 lbs.

Flash Point: (Setaflash)	
Base	94°F
Converter	108°F
Reducer 3	78°F

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine® 6130

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel – Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP5 to achieve a 1.5 – 3 mil anchor profile.
Steel – Non-Immersion Service: Abrasive blast to a Near White Metal cleanliness according to SSPC-SP10 to achieve a 1.5 – 3 mil anchor profile.
Concrete: Minimum cure is 28 days at 75° F and 50 % RH or the equivalent. Abrasive blast to remove laitance and form oils and to produce a surface roughness similar to medium sandpaper. Surfacing may be required to fill holes in order to produce a sealed surface.

Mixing

Power mix each component, then blend Converter into the Base and mix until uniform at the following ratio:

	2 Gal. Kit	10 Gal. Kit
GripLine 6130 Base	1 gallon	5 gallon
GripLine 6130 Converter	1 gallon	5 gallon

Thinning

Thinning is not required for most applications; however GripLine 6130 may be thinned up to 1 pint/gal. with Reducer 3.

Pot Life

Three hours at 75° and less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°
Maximum	90°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Inspection

Along with a final visual inspection, holiday test the GripLine 6130 film using a low-voltage holiday tester. Any holidays or voids in the film must be repaired prior to putting the tank lining in service.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and a .017" to .021" tip is recommended. A 30 mesh inline filter is recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 5 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Handle	Final Cure*
50°F	12 hrs.	32 hrs.	14 days
60°F	6 hrs.	16 hrs.	10 days
70°F	3 hrs.	8 hrs.	7 days
80°F	2 hrs.	5 hrs.	3 days
90°F	1 hr.	3 hrs.	36 hrs.

*Final Cure for Immersion Service.

Maximum Recoat

GripLine 6130 is formulated with an unlimited recoat window. However, since epoxies tend to blush, it is imperative that the blush and any surface contamination be removed prior to recoating. High pressure water washing is an acceptable method of removing blush and surface contamination.

Cleanup

Cleanup with Reducer 3.

Rev. 1/31/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6200

Epoxy Tank Lining

Features

- Excellent chemical resistance
- 100% solids
- Semi-gloss finish
- Zero VOC
- Excellent build on edges
- Ambient temperature cure
- Blush resistant during cure
- Easy to apply

Typical Uses

GripLine 6200 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel and concrete tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended.

Physical Data

Temperature resistance (non-immersion)	
Continuous	200°F
Non-continuous	250°F
Theoretical volume solids of mixed material	100%
Theoretical coverage of mixed gallon (1 mil)	1604 sq. ft.
Volatile Organic Content	
Unthinned	0 lbs./gal.

Resistance

GripLine 6200 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection. For specific immersion recommendation, contact U.S. Coatings Technical Service department.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Very Good	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent
Crude Oil	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 80 mils
Wet film thickness: 20 to 80 mils
Theoretical coverage: 80 sq. ft. @ 20 mils DFT
Note: The film thickness will vary with the intended service.

Substrates

GripLine 6200 is applied directly to steel as recommended. Use EpoxyGrip 2078 Primer when applying to concrete.

Topcoats

GripLine 6200 is normally not topcoated.

Colors

GripLine 6200 is available in brick red and medium gray. Normally the red is used to provide color contrast with a blasted steel surface.

Shipping Data

Packaging unit	3 gal.	15 gal.
Base	2 gal.	10 gal.
Converter	1 gal.	5 gal.
Shipping weight (approx.)		
GripLine 6200	3 gal.	15 gal.
	40 lbs.	200 lbs.
Reducer #5	1 gal.	5 gal.
	8 lbs.	40 lbs.
Flash Point: (Setaflash)		
Base	above 200°F	
Converter	above 200°F	
Reducer 5	-4°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6200

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1. Test for chlorides.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 3.5 – 5 mil anchor profile.
Concrete: High Pressure Water Blast or Abrasive Blast to remove any surface laitance, loose concrete, curing agents or any contaminants that could affect adhesion.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 2.5 – 3 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	3 Gal. Kit	15 Gal. Kit
GripLine 6200 Base	2 gallon	10 gallon
GripLine 6200 Converter	1 gallon	5 gallon

Thinning

Do not thin for applications using airless spray. GripLine 6200 may be thinned up to 1 pint/gal. with Reducer 5 for conventional spray.

Pot Life

Thirty minutes at 75°F and less at higher temperatures. Pot-life ends by the loss of film build.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	90°F	110°F	110°F

GripLine 6200 should be sprayed at a tip temperature of 110ºF to 120ºF to achieve proper atomization.

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Premier 45:1 ratio or Xtreme Sprayer is recommended with a .421 to a .641 tip size and a hopper feed. Remove any in-line filters.
Plural Component: During hot conditions in the field, plural component equipment, such as Graco's Xtreme Mix, is strongly recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 20 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	24 hrs.	48 hrs.	96 hrs.
70°F	12 hrs.	24 hrs.	60 hrs.
80°F	6 hrs.	12 hrs.	36 hrs.
90°F	3 hr.	6 hrs.	24 hrs.

Maximum Recoat

Surface Temperature	Time
50°F	5 days
75°F	48 hours
90°F	24 hours

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 3 or MEK.

NOTE: Much of the information listed on this data sheet is for general guideline purposes. For specific projects, refer to the specification for detailed instructions. If a specification is not available, contact your U.S. Coatings representative.

Rev. 2/18/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6210

Flake-Filled Epoxy Tank Lining

Features

- Excellent chemical resistance
- 100% solids
- Semi-gloss finish
- Zero VOC
- Excellent build on edges
- Ambient temperature cure
- Blush resistant during cure
- Low permeation

Typical Uses

GripLine 6210 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel and concrete tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills and waste water treatment plants.

Physical Data

Temperature resistance (non-immersion)		
Continuous	200°F	
Non-continuous	250°F	
Theoretical volume solids of mixed material	100%	
Theoretical coverage of mixed gallon (1 mil)		1604 sq. ft.
Volatile Organic Content		
Unthinned	0 lbs./gal.	

Resistance

GripLine 6210 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection. For specific immersion recommendation, contact U.S. Coatings Technical Service department.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Very Good	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent
Crude Oil	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 80 mils
Wet film thickness: 20 to 80 mils
Theoretical coverage: 80 sq. ft. @ 20 mils DFT
Note: The film thickness will vary with the intended service.

Substrates

GripLine 6210 is applied directly to steel as recommended. Use EpoxyGrip 2078 Primer when applying to concrete.

Topcoats

GripLine 6210 is normally not topcoated.

Colors

GripLine 6210 is available in brick red and medium gray. Normally the red is used to provide color contrast with a blasted steel surface.

Shipping Data

Packaging unit	3 gal.	15 gal.
Base	2 gal.	10 gal.
Converter	1 gal.	5 gal.
Shipping weight (approx.)		
GripLine 6210	3 gal.	15 gal.
	40 lbs.	200 lbs.
Reducer #5	1gal.	5gal.
	8 lbs.	40 lbs.
Flash Point: (Setaflash)		
Base	above 200°F	
Converter	above 200°F	
Reducer 5	-4°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6210

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1. Test for chlorides.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 3.5 – 5 mil anchor profile.
Concrete: High Pressure Water Blast or Abrasive Blast to remove any surface laitance, loose concrete, curing agents or any contaminants that could affect adhesion.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 2.5 – 3 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	3 Gal. Kit	15 Gal. Kit
GripLine 6210 Base	2 gallon	10 gallon
GripLine 6210 Converter	1 gallon	5 gallon

Thinning

Do not thin for applications using airless spray. GripLine 6200 may be thinned up to 1 pint/gal. with Reducer 5 for conventional spray.

Pot Life

Thirty minutes at 75°F and less at higher temperatures. Pot-life ends by the loss of film build.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	90°F	110°F	110°F

GripLine 6210 should be sprayed at a tip temperature of 110°F to 120°F to achieve proper atomization.

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Premier 45:1 ratio or Xtreme Sprayer is recommended with a .421 to a .641 tip size and a hopper feed. Remove any in-line filters.
Plural Component: During hot conditions in the field, plural component equipment, such as Graco's Xtreme Mix, is strongly recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 20 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	24 hrs.	48 hrs.	14 days
70°F	12 hrs.	24 hrs.	7 day
80°F	6 hrs.	12 hrs.	4 days
90°F	3 hr.	6 hrs.	2 days

Maximum Recoat

Surface Temperature	Time
50°F	5 days
75°F	48 hours
90°F	24 hours

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 3 or MEK.

NOTE: Much of the information listed on this data sheet is for general guideline purposes. For specific projects, refer to the specification for detailed instructions. If a specification is not available, contact your U.S. Coatings representative.

Rev. 1/31/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6220

Epoxy Tank Lining

Features

- Excellent chemical resistance
- 100% solids
- Semi-gloss finish
- Zero VOC
- Excellent build on edges
- Ambient temperature cure
- Blush resistant during cure
- Easy to apply

Typical Uses

GripLine 6220 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel and concrete tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended.

Physical Data

Temperature resistance (non-immersion)	
Continuous	200°F
Non-continuous	250°F
Theoretical volume solids of mixed material	100%
Theoretical coverage of mixed gallon (1 mil)	1604 sq. ft.
Volatile Organic Content	
Unthinned	0 lbs./gal.

Resistance

GripLine 6220 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection. For specific immersion recommendation, contact U.S. Coatings Technical Service department.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Very Good	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent
Crude Oil	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 80 mils
Wet film thickness: 20 to 80 mils
Theoretical coverage: 80 sq. ft. @ 20 mils DFT
Note: The film thickness will vary with the intended service.

Substrates

GripLine 6220 is applied directly to steel as recommended. Use EpoxyGrip 2078 Primer when applying to concrete.

Topcoats

GripLine 6220 is normally not topcoated.

Colors

GripLine 6220 is available in brick red and medium gray. Normally the red is used to provide color contrast with a blasted steel surface.

Shipping Data

Packaging unit	3 gal.	15 gal.
Base	2 gal.	10 gal.
Converter	1 gal.	5 gal.
Shipping weight (approx.)		
GripLine 6220	3 gal.	15 gal.
	40 lbs.	200 lbs.
Reducer #5	1 gal.	5 gal.
	8 lbs.	40 lbs.
Flash Point: (Setaflash)		
Base	above 200°F	
Converter	above 200°F	
Reducer 5	-4°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6220

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1. Test for chlorides.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 3.5 – 5 mil anchor profile.
Concrete: High Pressure Water Blast or Abrasive Blast to remove any surface laitance, loose concrete, curing agents or any contaminants that could affect adhesion.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 2.5 – 3 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	3 Gal. Kit	15 Gal. Kit
GripLine 6220 Base	2 gallon	10 gallon
GripLine 6220 Converter	1 gallon	5 gallon

Thinning

Do not thin for applications using airless spray. GripLine 6220 may be thinned up to 1 pint/gal. with Reducer 5 for conventional spray.

Pot Life

Forty-five minutes at 75°F and less at higher temperatures. Pot-life ends by the loss of film build. Contact U.S. Coatings for procedure to extend pot life.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	90°F	110°F	110°F

GripLine 6220 should be sprayed at a tip temperature of 110°F to 120°F to achieve proper atomization.

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Premier 45:1 ratio or Xtreme Sprayer is recommended with a .421 to a .641 tip size and a hopper feed. Remove any in-line filters.
Plural Component: During hot conditions in the field, plural component equipment, such as Graco's Xtreme Mix, is strongly recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 20 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	24 hrs.	48 hrs.	14 days
70°F	12 hrs.	24 hrs.	7 day
80°F	6 hrs.	12 hrs.	4 days
90°F	3 hr.	6 hrs.	2 days

Maximum Recoat

Surface Temperature	Time
50°F	5 days
75°F	48 hours
90°F	24 hours

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 3 or MEK.

NOTE: Much of the information listed on this data sheet is for general guideline purposes. For specific projects, refer to the specification for detailed instructions. If a specification is not available, contact your U.S. Coatings representative.

Rev 2/18/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6300

Vinyl Ester Lining

Features

- Uses Durakane 470 resin
- Lining for steel and concrete structures
- FDA Compliant
- Excellent chemical resistance
- VOC compliant
- High solids formulation
- Ambient temperature cure

Typical Uses

GripLine 6300 is used as a tank lining for steel and concrete for a wide variety of food processing, chemical processing, chemical storage and wastewater applications. GripLine 6300 is well suited for lining of Stock Chests, Bleach Towers and FGD tanks or maintenance coating for highly corrosive environments. Used to line steel tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended. Also used to line concrete tanks and pits for secondary containment.

Typical Properties

Barcol Hardness	ASTM D-2583	40
Tensil Strength	ASTM D638	10,000 psi
Tensile Elongation	ASTM D-638	3%
Flexural Strength	ASTM D-790	18,000 psi
HDT	ASTM D-648	270°F
Water Vapor Transmission	ASTM E-96	
Permeability (perm-inch)		0.0009
Solvent Extraction Test 21 CFR 177.2420		Passes for FDA applications
Temperature resistance (non-immersion)		
Continuous		250°F
Non-continuous		300°F
Theoretical volume solids of mixed material		83%±1%
Theoretical coverage of mixed gallon (1 mil)		1331 sq. ft.
Volatile Organic Content		
Unthinned		1.7 lbs./gal.

Resistance

GripLine 6300 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 30 mils per coat, two coats recommended
Wet film thickness: 25 mils maximum on vertical surfaces
Total dry film thickness: 40 to 60 mils
Theoretical coverage: 66 sq. ft. @ 20 mils DFT

Primer/Substrates

Concrete: GripLine 6300 Primer is recommended for concrete applications.
Steel: GripLine 6300 Primer as needed.

Topcoats

GripLine 6300 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6300 is available in medium gray.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gal.	5 gal.
Converter	3 fl. oz.	15 fl. oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs
Flash Point: (Setaflash)		
Base	88°F	
Converter	174°F	

Shelf Life: 3 Months for both the base and the converter when stored inside at 45°F to 75°F.

GripLine 6300

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Welds and weld splatter must be ground smooth. Grind all sharp projections and round all corners to a 1/8" radius.
Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 2 – 4 mil sharp (angular) anchor profile.
Concrete: The surface must be clean and dry. Test the surface with a moisture meter or the clear plastic patch method. Abrasive blast the concrete to remove any laitance and to open all voids in the concrete. The final surface texture should be similar to medium grit sandpaper.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6300 Base	1 gallon	5 gallons
GripLine 6300 Converter	3 fl. oz.	15 fl. oz.

Thinning

Normally not recommended

Pot Life

45 to 60 minutes at 50°F and 35 to 45 minutes at 75°F. Less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	75°F	90°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Plural Component Spray: Air assist Binks 37:1 ratio B8-DSQ cart mounted Super Slave spray unit with air controls, 7-1/2 S.S. hopper with cover and quick disconnect, SQ W.W. line filter, 50' resin, catalyst and air hose assembly, swivel, Century Gun with T.C. Seat, needle and tip.
Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and .035" tip is recommended. A 30 mesh inline filter is recommended.
Power Mixer: Use only explosion proof power mixers.
Brush and Roller: Use only high quality natural bristle brushes and solvent resistant rollers.

Drying Time

The following minimum times are based on a 25 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50°F	12 hrs.	2 days	72 hrs.
75°F	5 hrs.	1 day	48 hrs.

Note: If the maximum recoat time is exceeded, the coating should be mechanically abraded prior to application of additional lining material.

Cleanup

Cleanup with Reducer 3

Rev. 7/1/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6300-S

Sprayable Vinyl Ester Lining

Features

- Uses Derakane 470 resin
- Lining for steel and concrete structures
- FDA compliant
- Excellent chemical resistance
- VOC compliant
- High solids formulation
- Ambient temperature cure
- Low permeability

Typical Uses

GripLine 6300-S can be used as a tank lining for steel tanks for a wide variety of food processing, chemical processing, chemical storage and waste water applications. GripLine 6300-S is well suited for lining of Stock Chests, Bleach Towers and FGD tanks or maintenance coating for highly corrosive environments. Use to line steel tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills and other areas as recommended.

Typical Properties

Barcol Hardness	ASTM D-2583	40
Tensile Strength	ASTM D638	10,000 psi
Tensile elongation	ASTM D-638	3%
Bond strength (steel)	ASTM D-4541 Steel:	1,400 – 1,700 psi
Flexural strength	ASTM D-790	18,,000 psi
Water Vapor Transmission	ASTM E-96	
Permeability (perm-inch)		0.0009
HDT	ASTM D-648	270^{O}F
Solvent extraction Test 21 CFR 177.2420		Passes for FDA Applications
Temperature resistance (non-immersion)		
Continuous		250^{O}F
Non-continuous		300^{O}F
Theoretical volume solids of mixed material		83% +/- 1%
Theoretical coverage of mixed gallon (1 mil)		1,331 sq. ft.
Volatile Organic Content – Unthinned		1.7 lbs./gal.

Resistance

GripLine 6300-S is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection**.**

Exposure	**Immersion**	**Splash & Spillage**	**Fumes**
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 30 mils per coat, two coats recommended
Wet film thickness: 25 mils maximum on vertical surfaces
Total dry film thickness: 40 to 60 mils
Theoretical coverage: 66 sq. ft. @ 20 mils DFT

Primer/Substrates

Concrete: Grip-Line 6300 Primer. Contact U.S. Coatings for specific technical recommendation.
Steel: None required.

Topcoats

GripLine 6300-S is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6300-S is available in medium gray or off-white.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gal.	5 gal.
Converter	3 fl. oz.	15 fl. oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
Flash Point: (Setaflash)		
Base	88^{O}F	
Converter	174^{O}F	

Shelf Life: 3 months for both the base and the converter when stored inside at 45^{O}F to 75^{O}F.

GripLine 6300-S

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Welds and weld splatter must be ground smooth. Grind al sharp projections and round all corners to a 1/8" radius.
Abrasive blast to a White Metal cleanliness according to SSC-SP5 to achieve a 2 – 4 mil sharp (angular) anchor profile.
Concrete: New concrete must cure a minimum of 28 days. Concrete surface must be dry. Test with moisture meter or plastic patch. Abrasive blast to remove any laitence or loose concrete, and to achieve a roughened texture similar to medium grit sandpaper.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6300-S Base	1 gallon	5 gallons
GripLine 6300 Converter	3 fl. oz.	15 fl. oz.

Thinning

Normally not recommended.

Pot Life

45 to 60 minutes at 50^{O}F and 25 to 30 minutes at 75^{O}F; less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	50^{O}F	50^{O}F	50^{O}F
Maximum	75^{O}F	110^{O}F	100^{O}F

Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Plural Component Spray: Air assist Binks 37:1 ratio B8-DSQ cart mounted Super Slave spray unit with air controls, 7 -1/2 S.S. hopper with cover and quick disconnect, SQ W.W. line filter, 50' resin, catalyst and air hose assembly, swivel, Century Gun with T.C. Seat, needle and tip.
Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA ad Binks 18 or 62 having double regulated pressure pot, 3/8" I.D. minimum material hose and a 0.70" I.D. fluid tip and air car are recommended.
Airless Spray: Sprayer such as Graco's Premier 45:1 and .035" tip is recommended. Do not use in-line filters.
Power Mixer: Use only explosion proof power mixers.

Drying Time

The following minimum times are based on 25 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50^{O}F	12 hrs.	2 days	72 hrs.
75^{O}F	5 hrs.	1 day	48 hrs.

Note: If the maximum recoat time is exceeded, the coating should be mechanically abraded prior to application of additional lining material.

Cleanup

Cleanup with Reducer 3.

Rev. 7/1/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6300-T

Trowelable Vinyl Ester Lining

Features

- Uses Durakane 470 resin
- Lining for steel and concrete structures
- FDA compliant
- Excellent chemical resistance
- VOC compliant
- High solids formulation
- Ambient temperature cure
- Very low permeability

Typical Uses

GripLine 6300-T can be used as a tank lining for steel tanks for a wide variety of food processing, chemical processing, chemical storage and waste water applications. GripLine 6300-T is well suited for lining of Stock Chests, Bleach Towers and FGD tanks or maintenance coating for highly corrosive environments. Use to line steel tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills and other areas as recommended.

Typical Properties

Barcol Hardness	ASTM D-2583	40
Tensile Strength	ASTM D638	10,000 psi
Tensile elongation	ASTM D-638	3%
Bond strength (steel)	ASTM D-4541 Steel:	1,400 – 1,700 psi
Flexural strength	ASTM D-790	18,000 psi
Water Vapor Transmission	ASTM E-96	
Permeability (perm-inch)		0.0009
HDT	ASTM D-648	270^{O}F
Solvent extraction Test 21 CFR 177.2420		Passes for FDA Applications
Temperature resistance (non-immersion)		
Continuous		250^{O}F
Non-continuous		300^{O}F
Theoretical volume solids of mixed material		83% +/- 1%
Theoretical coverage of mixed gallon (1 mil)		1,331 sq. ft.
Volatile Organic Content – Unthinned		1.7 lbs./gal.

Resistance

GripLine 6300-T is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	**Immersion**	**Splash & Spillage**	**Fumes**
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 30 to 50 mils per coat, two coats recommended
Wet film thickness: 60 mils maximum on vertical surfaces
Total dry film thickness: 60 to 100 mils
Theoretical coverage: 33 sq. ft. @ 40 mils DFT

Primer/Substrates

Concrete: Varies with concrete. Contact U.S. Coatings for specific technical recommendation.
Steel: None required.

Topcoats

GripLine 6300-T is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6300-T is available in medium gray and off-white.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gal.	5 gal.
Converter	3 fl. oz.	15 fl. oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
Flash Point: (Setaflash)		
Base	88^{O}F	
Converter	174^{O}F	

Shelf Life: 3 months for both the base and the converter when stored inside at 45^{O}F to 75^{O}F.

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Welds and weld splatter must be ground smooth. Grind al sharp projections and round all corners to a 1/8" radius.
Abrasive blast to a White Metal cleanliness according to SSC-SP5 to achieve a 3 – 5 mil sharp (angular) anchor profile.
Concrete: New concrete must cure a minimum of 28 days. Concrete surface must be dry. Test with moisture meter or plastic patch. Abrasive blast to remove any laitance or loose concrete, and to achieve a roughened texture similar to medium grit sandpaper.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6300-T Base	1 gallon	5 gallons
GripLine 6300 Converter	3 fl. oz.	15 fl. oz.

Thinning

Not recommended.

Pot Life

45 to 60 minutes at 50^{O}F and 25 to 30 minutes at 75^{O}F; less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	50^{O}F	50^{O}F	50^{O}F
Maximum	75^{O}F	110^{O}F	100^{O}F

Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Use a masonry trowel or float to apply the material. Use styrene to dampen the trowel and to smooth the surface.
Power Mixer: Use only explosion proof power mixers.

Drying Time

The following minimum times are based on 25 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50^{O}F	12 hrs.	2 days	72 hrs.
75^{O}F	5 hrs.	1 day	48 hrs.

Note: If the maximum recoat time is exceeded, the coating should be mechanically abraded prior to application of additional lining material.

Cleanup

Cleanup with Reducer 3.

Rev. 7/1/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6300-G

Vinyl Ester Gel Coat

Features

- Durakane 470 resin
- Sprayable
- For steel and concrete
- Excellent chemical and acid resistance
- VOC compliant
- Separate paraffin additive
- Fast cure formula

Typical Uses

GripLine 6300-G can be used as a thick-film, reinforced system per API-652 to line steel tanks. Also, it can be used as a gel coat (or wax coat) as a curing mechanism for vinyl esters. GripLine 6300-G is well suited for lining of Crude Oil Storage Tanks, Bleach Towers, Scrubbers and FGD tanks. Used to line steel tanks and to coat structural steel for off-shore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp and paper mills and other areas as recommended.

Typical Properties

Barcol Hardness	ASTM D-2583	40
Tensile Strength	ASTM D638	10,000 psi
Tensile elongation	ASTM D-638	3%
Flexural strength	ASTM D-790	18,000 psi[5]
Water Vapor Transmission	ASTM E-96	
Permeability (perm-inch)		0.0005
HDT	ASTM D-648	270°F
Solvent extraction Test 21 CFR 177.2420		Passes for FDA Applications
Temperature resistance (non-immersion)		
Continuous		250°F
Non-continuous		300°F
Theoretical volume solids of mixed material		83% +/- 1%
Theoretical coverage of mixed gallon (1 mil)		1,331 sq. ft.
Volatile Organic Content – Unthinned		1.7 lbs./gal.

Resistance

GripLine 6300 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 30 to 40 mils per coat, two coats recommended
Wet film thickness: 25 mils maximum on vertical surfaces
Total dry film thickness: 60 to 80 mils
Theoretical coverage: 44 sq. ft. @ 30 mils DFT

Primer/Substrates

Concrete: Varies with concrete. Contact U.S. Coatings for specific technical recommendation.
Steel: None required.

Topcoats

GripLine 6300-G is normally topcoated with itself and does not require additional topcoats. In most instances, the addition of a paraffin additive in the final coat is necessary for complete curing.

Colors

Gray only.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gal.	5 gal.
Converter	3 fl. oz.	15 fl. oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
Flash Point: (Setaflash)		
Base	88°F	
Converter	174°F	

Shelf Life: 3 months for both the base and the converter when stored inside at 45°F to 75°F.

GripLine 6300-G

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Welds and weld splatter must be ground smooth. Grind al sharp projections and round all corners to a 1/8" radius.
Abrasive blast to a White Metal cleanliness according to SSC-SP5 to achieve a 3 – 5 mil sharp (angular) anchor profile.
Concrete: The surface must be clean and dry. Test the surface with a moisture meter or the "clear plastic patch" method.
Abrasive blast the substrate to remove any laitance and to open all voids in the concrete. The final surface texture should be similar to medium grit sandpaper.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6300-G Base	1 gallon	5 gallons
GripLine 6300-G Converter	3 fl. oz.	15 fl. oz.

Thinning

Not recommended.

Pot Life

45 to 60 minutes at 50°F and 25 to 30 minutes at 75°F; less at higher temperatures.

Application

For standard FRP lining application, apply one coat of GripLine 6300-G at 30 to 40 mils, followed immediately with a 1.5 oz. chopped strand mat. Use a wet roller to rollout the mat, removing all entrapped air and to thoroughly saturate the mat. Follow this with a wet-on-wet application of an additional 30 to 40 mils of GripLine 6300-G. Within 24 hours, sand or "shave" any fiberglass strands protruding from the system. Apply one or two gel topcoats of GripLine 6300-G, at 10 to 15 mils per coat, with the paraffin additive in the final coat.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	75°F	110°F	100°F

Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Plural Component Spray: Air assist Binks 37:1 ratio B8-DSQ cart mounted Super Slave spray unit with air controls, 7 -1/2 S.S. hopper with cover and quick disconnect, SQ W.W. line filter, 50' resin, catalyst and air hose assembly, swivel, Century Gun with T.C. Seat, needle and tip.
Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA ad Binks 18 or 62 having double regulated pressure pot, 3/8" I.D. minimum material hose and a 0.70" I.D. fluid tip and air car are recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and .035" tip is recommended. A 30 mesh inline filter is recommended.
Power Mixer: Use only explosion proof power mixers.

Drying Time

The following minimum times are based on 30 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50°F	12 hrs.	2 days	72 hrs.
75°F	5 hrs.	1 day	48 hrs.

Cleanup

Cleanup with Reducer 3.

Rev. 7/1/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6300 Primer

Vinyl Ester Lining

Features

- Durakane resin
- Sprayable
- For concrete and steel
- Excellent wetting characteristics
- VOC compliant
- Separate paraffin additive
- Fast cure formula

Typical Uses

GripLine 6300 Primer is used as a penetrating primer for concrete to increase the adhesion to the GripLine 6300 system to concrete and to reduce the blow back from out gassing. Also used on blasted steel when a primer is required.

Typical Properties

Barcol Hardness	ASTM D-2583	30
Tensile Strength	ASTM D638	11,000 psi
Tensile elongation	ASTM D-638	8%
Flexural strength	ASTM D-790	19,000 psi X 10^5
HDT	ASTM D-648	180^{O}F
Temperature resistance (non-immersion)		
Continuous		180^{O}F
Non-continuous		200^{O}F
Theoretical volume solids of mixed material		83% +/- 1%
Theoretical coverage of mixed gallon (1 mil)		1,331 sq. ft.
Volatile Organic Content – Unthinned		1.7 lbs./gal.

Resistance

GripLine 6300 Primer when topcoated with GripLine 6300 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 5 to 10 mils per coat
Wet film thickness: 6 to 12 mils maximum on vertical surfaces
Theoretical coverage: 266 sq. ft. @ 5 mils DFT; 133 sq. ft. @ 10 mils

Primer/Substrates

Concrete: GripLine 6300 is the recommended primer for the GripLine 6300 systems.
Steel: As Needed.

Topcoats

GripLine 6300 Primer is normally topcoated with GripLine 6300.

Colors

GripLine 6300 Primer is clear.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gal.	5 gal.
Converter	3 fl. oz.	15 fl. oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
Flash Point: (Setaflash)		
Base	88^{O}F	
Converter	174^{O}F	

Shelf Life: 3 months for both the base and the converter when stored inside at 45^{O}F to 75^{O}F.

GripLine 6300 Primer

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Concrete: The surface must be clean and dry. Test the surface with a moisture meter or the "clear plastic patch" method.
Abrasive blast the substrate to remove any laitance and to open all voids in the concrete. The final surface texture should be similar to medium grit sandpaper.
Steel: Near White metal blast per SSPC-SP10.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6300 Primer Base	1 gallon	5 gallons
GripLine 6300 Converter	3 fl. oz.	15 fl. oz.

Thinning

Not recommended.

Pot Life

45 to 60 minutes at 50^{O}F and 25 to 30 minutes at 75^{O}F, less at higher temperatures.

Application

Apply one coat of GripLine 6300 Primer at 5 to 10 mils, followed by the GripLine 6300 system.

Applications Conditions

	Material	Surface	Ambient
Minimum	50^{O}F	50^{O}F	50^{O}F
Maximum	75^{O}F	110^{O}F	100^{O}F

Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Plural Component Spray: Air assist Binks 37:1 ratio B8-DSQ cart mounted Super Slave spray unit with air controls, 7 -1/2 S.S. hopper with cover and quick disconnect, SQ W.W. line filter, 50' resin, catalyst and air hose assembly, swivel, Century Gun with T.C. Seat, needle and tip.
Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA ad Binks 18 or 62 having double regulated pressure pot, 3/8" I.D. minimum material hose and a 0.70" I.D. fluid tip and air car are recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and .035" tip is recommended. A 30 mesh inline filter is recommended.
Power Mixer: Use only explosion proof power mixers.
Brush and Roll: Use only high quality natural bristle brush and solvent resistant rollers.

Drying Time

The following minimum times are based on 5 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50^{O}F	12 hrs.	2 days	72 hrs.
75^{O}F	5 hrs.	1 day	48 hrs.

Cleanup

Cleanup with Reducer 3.

Rev. 7/1/14
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CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6310-S

Flake Glass Vinyl Ester Lining

Features

- Uses Derakane 470 resin
- FGD lining performance
- High temperature resistance
- Sprayable
- Excellent chemical resistance
- VOC compliant
- High solids formulation
- Ambient temperature cure
- Direct to metal application

Typical Uses

GripLine 6310 is specially formulated to withstand high temperatures, wet gas and chemical exposures found in wet FGD systems. This unique formulation is suitable for service up to 280°F in wet FGD service and will withstand dry service temperatures up to 380°F.

GripLine 6310 is well suited for use in high temperature service, oxidizing acid service such as nitric or chromic, in acid bleach environments such as chlorine dioxide and acid/solvent solutions. GripLine 6310 is well suited for lining of Stock Chests, Bleach Towers and FGD tanks or maintenance coating for highly corrosive environments. Used to line steel surfaces for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended.

Typical Properties

Barcol Hardness	ASTM D-2583	40
Tensile Strength	ASTM D-638	10,000 psi
Tensile Elongation	ASTM D-638	3%
Flexural Strength	ASTM D-638	18,000 psi
Water Vapor Transmission Permeability (perm-inch) ASTM E-96		0.0005
Bond Strength to Steel		1,400psi – 1,700psi
Bond Strength to Concrete		Concrete cohesive failure
Temperature resistance		
Wet		280° F
Dry		380°F
Theoretical volume solids of mixed material		82%±1%
Theoretical coverage of mixed gallon (1 mil)		1315 sq. ft.
Volatile Organic Content		
Unthinned		1.8 lbs./gal.

Resistance

GripLine 6310 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness:
- Base Coat: 25 mils
- Finish Coat: 25 mils

Wet film thickness:
- Base Coat: 30 mils
- Finish Coat: 30 mils

Total dry film thickness: 50 mils

Theoretical coverage: 26 sq. ft. @ 50 mils DFT

Primer/Substrates

Steel: GripLine 6310 is applied directly to properly prepared steel substrates.

Concrete: GripLine 6300 Primer as needed.

Topcoats

GripLine 6310 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6310 is available in off white/gray.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gal.	5 gal.
Converter	3 fl. oz.	15 fl. oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
Flash Point: (Setaflash)		
Base	80°F	
Converter	174°F	

Shelf Life: 4 Months for both the base and the converter when stored inside at 50°F to 75°F.

GripLine 6310 S

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Welds and weld splatter must be ground smooth. Grind all sharp projections and round all corners to a 1/8" radius.
Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 2 – 4 mil sharp (angular) anchor profile.
Concrete: The surface must be clean and dry. Test the surface with a moisture meter or the clear plastic patch method. Abrasive blast the concrete to remove any laitance, and to open all voids in the concrete. The final surface texture should be similar to medium grit sandpaper.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6310 Base	1 gallon	5 gallons
GripLine 6300 Converter	3 fl.oz.	15 fl. oz.

Thinning

Normally not recommended

Pot Life

45 to 60 minutes at 75°F. Less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	70°F	50°F	50°F
Maximum	80°F	90°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Plural Component Spray: Air assist Binks 37:1 ratio B8-DSQ cart mounted Super Slave spray unit with air controls, 7-1/2 S.S. hopper with cover and quick disconnect, SQ W.W. line filter, 50' resin, catalyst and air hose assembly, swivel, Century Gun with T.C. Seat, needle and tip.
Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" fluid nozzle is recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and a reversible "self cleaning" tip with a .05" orifice or larger, tungsten carbide nozzle.
Power Mixer: Use only explosion proof power mixers.

Drying Time

The following minimum times are based on a 25 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50°F	12 hrs.	2 days	72 hrs.
75°F	5 hrs.	1 day	48 hrs.

Note: If the maximum recoat time is exceeded or exposed to sunlight for over 4 hours, the coating should be mechanically abraded prior to application of additional lining material.

Cleanup

Cleanup with Reducer 3.

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CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6310-T

Trowelable Flake Glass Vinyl Ester Lining

Features

- Uses Durakane 470 resin
- FGD lining performance
- High temperature resistance
- Trowelable
- Excellent chemical resistance
- VOC compliant
- High solids formulation
- Ambient temperature cure
- Direct to metal application
- Very low permeability

Typical Uses

GripLine 6310-T is formulated to withstand high temperatures, wet gas and chemical exposures found in wet FGD systems. This unique formulation is suitable for service up to 280°F in wet FGD service and will withstand dry service temperatures up to 400°F.

GripLine 6310-T is well suited for use in high temperature service, oxidizing acid service such as nitric acid or chromic, in acid bleach environments such as chlorine dioxide and acid/solvent solutions. GripLine 6310-T is well suited for lining of Stock Chests, Bleach Towers and FGD tanks or maintenance coating for highly corrosive environments. Use to line steel surfaces for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills and other areas as recommended.

Typical Properties

Barco Hardness	ASTM D-638	40
Tensile Strength	ASTM D-638	10,000 psi
Tensile elongation	ASTM D-638	3 %
Bond strength (steel)	ASTM D-4541	1,600 – 1,800 psi
Bond strength (concrete)		Concrete cohesive failure
Flexural strength	ASTM D-638	18,000 psi
Water Vapor Transmission	ASTM E-96	
Permeability (perm-inch)		0.0004
Temperature resistance (non-immersion)		
Wet		280°F
Dry		400°F
Theoretical volume solids of mixed material		83% +/- 1%
Theoretical coverage of mixed gallon (1 mil)		1,331 sq. ft.
Volatile Organic Content – Unthinned		1.7 lbs./gal.

Resistance

GripLine 6310-T is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Good	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness:
- Base Coat: 40 - 50 mils
- Finish Coat: 30 mils

Wet film thickness:
- Base Coat: 50 - 60 mils
- Finish Coat: 40 mils

Total dry film thickness: 70 - 80 mils
Theoretical coverage: 17 sq. ft @ 75 mils DFT

Primer/Substrates

Steel: GripLine 6310-T is applied directly to properly prepared steel substrates
Concrete: GripLine 6300 Primer. Contact U.S. Coatings for specific technical recommendation.

Topcoats

GripLine 6310-T is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6310-T is available in medium gray and off-white.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	1 gallon	5 gallons.
Converter	3 fl oz	15 fl oz.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
Flash Point: (Setaflash)		
Base	80°F	
Converter	174°F	

Shelf Life: 3 months for both the base and the converser when stored inside at 50°F to at 75°F.

GripLine 6310-T

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Welds and weld splatter must be ground smooth. Grind al sharp projections and round all corners to a 1/8" radius.
Abrasive blast to a White Metal cleanliness according to SSC-SP5 to achieve a 3 – 5 mil sharp (angular) anchor profile.
Concrete: New concrete must cure a minimum of 28 days. Concrete surface must be dry. Test with moisture meter or plastic patch. Abrasive blast to remove any laitance or loose concrete and to achieve a roughened texture similar to medium grit sandpaper.

Mixing

Power mix resin to a smooth, uniform consistency before combining in the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6310-T Base	1 gallon	5 gallons
GripLine 6300 Converter	3 ounces	15 ounces

Thinning

Not recommended.

Pot Life

45 to 60 minutes at 75^{O}F; less at higher temperatures.

Applications Conditions

	Material	Surface	Ambient
Minimum	70°F	50°F	50°
Maximum	80°F	90°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation, which may dull the finish.

Application Equipment

Use a masonry trowel or float to apply the material. Use styrene to dampen the trowel and to smooth the surface.
Power Mixer: Use only explosion proof power mixers.

Drying Time

The following minimum times are based on 25 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	Recoat Minimum	Recoat Maximum	Service Cure
50^{O}F	12 hrs.	2 days	72 hrs.
75^{O}F	5 hrs.	1 day	48 hrs.

Note: If the maximum recoat time is exceeded, the coating should be mechanically abraded prior to application of additional lining material.

Recoat

GripLine 6310 should cure firm to the touch at minimum before touch-up or recoating. If material has not bee exposed to contaminants or cured beyond 72 hours at 75^{O}F, no inter-coat prep is required. If surface has been exposed to contaminants or has cured beyond 72 hours or has been exposed to direct sunlight for over 4 hours then all contamination must be removed and the surface mechanically abraded before applying additional material.

Cleanup

Cleanup with Reducer 3.

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HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6400

100% Solids Urethane Tank Lining - NSF

Features

- Complies with ANSI/NSF Standard 61
- Fast cure urethane elastomer
- Outstanding abrasion resistance
- Zero VOC – solvent free
- Direct to metal application
- Single coat application
- Excellent build on edges
- Cures down to 25°F

Typical Uses

GripLine 6400 is used as a direct to metal tank lining system for steel potable water tanks and/or piping.

Physical Data

Impact resistance (ASTM G 14-15mm ball)	160 in-lbs
Tear Resistance (ASTM D624)	352 lb/in
Elongation (ASTM D412)	52%
Tensile Strength (ASTM D412)	2878 psi
Hardness (ASTM D2240)	61-65 Shore "D"
Flexibility (ASTM D1737)	Pass 1/8" bend @ 30 mils
Water Vapor Transmission Rate @40 mils	0.080 gm/100in2 per 24 hrs.
Accelerated Weathering (ASTM G 23 – QUV 2500 hrs)	No cracking, checking or loss of flexibility; slight chalking
Cathodic Disbondment (ASTM G8)	Pass
Theoretical volume solids of mixed material	100%
Theoretical coverage of mixed gallon (1 mil)	1604 sq. ft.
Volatile Organic Content	0.0 lbs./gal.
Ratio	2:1 (A to B)

Resistance

GripLine 6400 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage
Acidic	N/R	Excellent
Alkaline	N/R	Good
Solvents	N/R	Fair
Salt water	Excellent	Excellent
Water	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 25 to 125 mils
Wet film thickness: 25 to 125 mils
Theoretical coverage: 64 sq. ft. @ 25 mils DFT
GripLine 6400 may be built 25 to 100 mils DFT in one coat through application of multiple passes.

Substrates

GripLine 6400 is applied directly to steel as recommended.

Topcoats

GripLine 6400 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6400 is available in tan only.

Shipping Data

Packaging unit	150 gal.
Base	100 gal.
Converter	50 gal.
Shipping weight (approx.)	
Package unit	1350 lbs.
Flash Point: (Setaflash)	
Part A	500°F
Part B	230°F

Shelf Life: Part A: Minimum 24 months at 75°F (24°C)
Part B: Minimum 12 months at 75°F (24°C)

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original, unopened containers.

GripLine 6400

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel and Cast Iron: Immersion and Non-immersion: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 and obtain 3.5 – 4 mil anchor profile.

Mixing

Power mix Resin (Part A) thoroughly for 30 minutes to a uniform consistence. Note: Part B requires no mixing before use.
Extreme care must be taken to use separate mixing devices to prevent cross contamination of materials.

	150 Gallon Kit
GripLine 6400 Base	100 gallons
GripLine 6400 Converter	50 gallons

Thinning

Do Not Thin!

Pot Life

Five to eight minutes at 72°F. Do not apply material that has exceeded pot life.

Applications Conditions

	Material	**Surface**	**Ambient**	**Humidity**
Optimum	80°-90°F (27°-32°C)	40-140°F (4°-60°C)	40°-120°F (4°-49°C)	30-70%
Minimum	80°F (27°C)	40°F (4°C)	25°F (-4°C)	0%
Maximum	90°F (32°C)	140°F (60°C)	120°F (49°C)	95%

Industry standards are for substrate temperatures to be 5°F (3°C) above the dew point. Caution: This product is moisture sensitive in the liquid stage and until fully cured. Protect from high humidity, dew and direct moisture contact until fully cured. Application and/or curing in humidities above maximum, or exposed to moisture from rain or dew may result in loss of gloss and/or microbubbling of the product.

Storage

40-110°F
0-100% Relative Humidity
Store indoors and keep dry. Do not place drums directly on concrete or ground. Store on top of wood slats or pallets. Blanket all partial drums with nitrogen gas to prevent moisture contamination. Avoid freezing. Do not open until ready to use. Rotate Resin (Part A) drums regularly if stored for the long term.

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.
Plural Component Airless Spray: Graco Hydra-Cat 45:1 fluid-to-air ratio, King air motor with triplex bottom on a 2A:1B, fixed –volume ratio. Standard equipment typically includes heated hoses, drum heaters, suction feed from 50 gallon steel drums (feed pumps not required in most cases), recirculation system, automatic high-pressure shut-off system. Other set-ups may be required and many options are available. Applicator training is required and spray equipment must be approved by U.S. Coatings.
Touch-Up: Brush apply material from GripLine 6400 Repair Kit. For use on small areas only. Contact your U.S. Coatings representative for additional information.

Drying Time

Surface Temp. & 50% Relative Humidity	**Dry to Receive Light Traffic**	**Maximum Recoat Time**	**Cure For Immersion Service**
72°F (22°C)	2 Hours	18 Hours	24 Hours*

These times are based on recommend dry film thicknesses.

If maximum recoat time is exceeded, the surface must be abraded by sweep blast prior to the application of additional coats.

*24 hours applies to potable water. For other liquids, consult with U.S. Coatings.

Repair

Repair and/or touch-up should be made using GripLine 6400. Contact U.S. Coatings for material recommendation when plural component spray equipment is not available.

Cleanup

MEK or a 1:1 blend of MEK and Toluol.

Rev. 1/31/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6450

NSF Epoxy Tank Lining

Features

- Complies with ANSI/NSF Standard 61
- 100% solids
- Rapid turnaround
- Two component epoxy
- Zero VOC
- Direct to metal application
- Excellent build on edges
- Ambient temperature cure

Typical Uses

GripLine 6450 is used as a direct to metal tank lining system for steel potable water tanks and/or piping. Also used in concrete wet wells. GripLine 6450 is NSF listed under NSP 120.

Physical Data

Impact resistance (ASTM G 14-15mm ball)	125.4 in-lbs (1447 cm/kg)
Adhesion (ASTM D 4541)	>1000psi
Elongation (ASTM D 412)	<3%
Tensile Strength (ASTM D 412)	4000 psi
Accelerated Weathering (ASTM G 23 – QUV 2500 hrs)	No cracking, checking or loss of flexibility; slight chalking
Theoretical volume solids of mixed material	100%
Theoretical coverage of mixed gallon (1 mil)	1604 sq. ft.
Volatile Organic Content	0.0 lbs./gal.

Resistance

GripLine 6450 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage
Acidic	N/R	Excellent
Alkaline	N/R	Good
Solvents	N/R	Fair
Salt water	Excellent	Excellent
Water	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 15 to 25 mils
Wet film thickness: 15 to 25 mils
Theoretical coverage: 106 sq. ft. @ 15 mils DFT
GripLine 6400 may be built 15 to 100 mils DFT in one coat through application of multiple passes.

Substrates

GripLine 6450 is applied directly to steel and concrete as recommended.

Topcoats

GripLine 6450 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6450 is available in white and others upon special order.

Shipping Data

Packaging unit	3 gal.	15 gal.
Part A	2 gal	10 gal.
Part B	1 gal.	5 gal.
Shipping weight (approx.)		
Package unit	38 lbs.	190 lbs.
Flash Point: (PMCC)		
Part A	>200°F	
Part B	>200°F	

Shelf Life: 12 months for both the base and the converter when stored inside at 60°F to 90°F.

GripLine 6450

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel for Immersion Service: Abrasive blast to Near White Metal cleanliness in accordance with SSPC-SP 10 and obtain 3 – 4 mil anchor profile.

Mixing

Power mix Part B component separately and thoroughly for 5 to 10 minutes, to achieve a uniform consistency.
Extreme care must be taken to use separate mixing devices to prevent cross contamination of materials.

	3 Gal. Kit	15 Gal. Kit
GripLine 6450 Part A	2 gallons	10 gallons
GripLine 6450 Part B	1 gallon	5 gallons

Thinning

Thinning is not normally recommended, however, thinning up to 20% by volume with Reducer #5 can be made for small areas.

Pot Life

30 minutes at 75°F. Reducer #5 extends the pot life.

Applications Conditions

	Material*	Surface	Ambient
Minimum	75°F	50°F	50°
Maximum	140°F	100°F	100°F

*Materials must be preheated to 75-90°F minimum prior to use.
Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Heated Plural Component Airless Only

- 2:1 ratio capable of producing a minimum delivery rate of 1 1/4 gallons per minute at a tip pressure of 2600-3000 psi.
- Proportioner heaters and heated hose capable of maintaining material temperatures of 135-150°F at the spray tip.
- Bsmf heaters capable of maintaining material temperatures of 75-90°F during application.
- 2:1 ratio feed pumps minimum.
- Contact U.S. Coatings for specific information.

Drying Time

The following minimum times are based on a 30-50% RH. Excessive film thickness, cooler temperatures or inadequate ventilation will require longer cure times.

Surface Temperature	To Touch	Final Cure
50-60°F	8 hours	14 days
70-80°F	3 hours	7 days
90-100°F	2 hours	3 days

Recoat Times

Surface Temperature	Minimum	Maximum
50-60°F	12 hours	72 hours
70-80°F	4 hours	48 hours
90-100°F	2 hours	24 hours

If the maximum recoat time is exceeded, contact U.S. Coatings for recommended recoat procedure.

Repair

Repairs and/or touch-up should be made using GripLine 6450. Contact U.S. Coatings for material recommendation when plural component spray equipment is not available.

Cleanup

Reducer #5 or MEK.

Rev. 1/31/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6500

Novolac Tank Lining

Features

- Excellent solvent and chemical resistance
- 100% solids
- Semi-gloss finish
- Zero VOC
- Excellent build on edges
- Ambient temperature cure
- Low odor
- Easy to apply

Typical Uses

GripLine 6500 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel and concrete tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended.

Physical Data

Temperature resistance (non-immersion)	
Continuous	200°F
Non-continuous	250°F
Theoretical volume solids of mixed material	100%
Theoretical coverage of mixed gallon (1 mil)	1604 sq. ft.
Volatile Organic Content	
Unthinned	0 lbs./gal.

Resistance

GripLine 6500 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection. For specific immersion recommendation, contact U.S. Coatings Technical Service department.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Excellent	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent
Crude Oil	Excellent	Excellent	Excellent
Sour Crude	Excellent	Excellent	Excellent
Gasoline	Excellent	Excellent	Excellent
Diesel Fuel	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 80 mils
Wet film thickness: 20 to 80 mils
Theoretical coverage: 80 sq. ft. @ 20 mils DFT
Note: The film thickness will vary with the intended service.

Substrates

GripLine 6500 is applied directly to steel as recommended. Use EpoxyGrip 2078 Primer when applying to concrete.

Topcoats

GripLine 6500 is normally not topcoated.

Colors

GripLine 6500 is available in brick red and medium gray. Normally the red is used to provide color contrast with a blasted steel surface.

Shipping Data

Packaging unit	3 gal.	15 gal.
Base	2 gal.	10 gal.
Converter	1 gal.	5 gal.
Shipping weight (approx.)		
GripLine 6500	3 gal.	15 gal.
	40 lbs.	200 lbs.
Reducer #5	1 gal.	5 gal.
	8 lbs.	40 lbs.
Flash Point: (Setaflash)		
Base	above 200°F	
Converter	above 200°F	
Reducer 5	-4°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6500

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1. Test for chlorides.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 3.5 – 5 mil anchor profile.
Concrete: High Pressure Water Blast or Abrasive Blast to remove any surface laitance, loose concrete, curing agents or any contaminants that could affect adhesion.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 2.5 – 3 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	3 Gal. Kit	15 Gal. Kit
GripLine 6500 Base	2 gallon	10 gallon
GripLine 6500 Converter	1 gallon	5 gallon

Thinning

Do not thin for applications using airless spray. GripLine 6500 may be thinned up to 1 pint/gal. with Reducer 5 for conventional spray.

Pot Life

Thirty minutes at 75°F and less at higher temperatures. Pot-life ends by the loss of film build.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	90°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Premier 45:1 ratio or Xtreme Sprayer is recommended with a .421 to a .641 tip size and a hopper feed. Remove any in-line filters.
Plural Component: During hot conditions in the field, plural component equipment, such as Graco's Xtreme Mix, is strongly recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 20 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	24 hrs.	48 hrs.	96 hrs.
70°F	12 hrs.	24 hrs.	60 hrs.
80°F	6 hrs.	12 hrs.	36 hrs.
90°F	3 hr.	6 hrs.	24 hrs.

Maximum Recoat

Surface Temperature	Time
50°F	5 days
75°F	48 hours
90°F	24 hours

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 3 or MEK.

NOTE: Much of the information listed on this data sheet is for general guideline purposes. For specific projects, refer to the specification for detailed instructions. If a specification is not available, contact your U.S. Coatings representative.

Rev. 2/17/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6520

Novolac Tank Lining

Features

- Excellent solvent and chemical resistance
- 100% solids
- Semi-gloss finish
- Zero VOC
- Excellent build on edges
- Ambient temperature cure
- Low odor
- Easy to apply

Typical Uses

GripLine 6520 is used as a tank lining or maintenance coating for highly corrosive environments. Used to line steel and concrete tanks and coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended.

Physical Data

Temperature resistance (non-immersion)	
Continuous	200°F
Non-continuous	250°F
Theoretical volume solids of mixed material	100%
Theoretical coverage of mixed gallon (1 mil)	1604 sq. ft.
Volatile Organic Content	
Unthinned	0 lbs./gal.

Resistance

GripLine 6520 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection. For specific immersion recommendation, contact U.S. Coatings Technical Service department.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Excellent	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent
Crude Oil	Excellent	Excellent	Excellent
Sour Crude	Excellent	Excellent	Excellent
Gasoline	Excellent	Excellent	Excellent
Diesel Fuel	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 20 to 80 mils
Wet film thickness: 20 to 80 mils
Theoretical coverage: 80 sq. ft. @ 20 mils DFT
Note: The film thickness will vary with the intended service.

Substrates

GripLine 6520 is applied directly to steel as recommended. Use EpoxyGrip 2078 Primer when applying to concrete.

Topcoats

GripLine 6520 is normally not topcoated.

Colors

GripLine 6520 is available in brick red and medium gray. Normally the red is used to provide color contrast with a blasted steel surface.

Shipping Data

Packaging unit	3 gal.	15 gal.
Base	2 gal.	10 gal.
Converter	1 gal.	5 gal.
Shipping weight (approx.)		
GripLine 6520	3 gal.	15 gal.
	40 lbs.	200 lbs.
Reducer #5	1 gal.	5 gal.
	8 lbs.	40 lbs.

Flash Point: (Setaflash)

Base	above 200°F
Converter	above 200°F
Reducer 5	-4°F

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6520

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1. Test for chlorides.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 3.5 – 5 mil anchor profile.
Concrete: High Pressure Water Blast or Abrasive Blast to remove any surface laitance, loose concrete, curing agents or any contaminants that could affect adhesion.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 2.5 – 3 mil anchor profile.

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	3 Gal. Kit	15 Gal. Kit
GripLine 6520 Base	2 gallon	10 gallon
GripLine 6520 Converter	1 gallon	5 gallon

Thinning

Do not thin for applications using airless spray. GripLine 6520 may be thinned up to 1 pint/gal. with Reducer 5 for conventional spray.

Pot Life

Forty-five minutes at 75°F and less at higher temperatures. Pot-life ends by the loss of film build. Contact U.S. Coatings for procedure to extend pot life.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°F
Maximum	90°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Premier 45:1 ratio or Xtreme Sprayer is recommended with a .421 to a .641 tip size and a hopper feed. Remove any in-line filters.
Plural Component: During hot conditions in the field, plural component equipment, such as Graco's Xtreme Mix, is strongly recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 20 mil DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	24 hrs.	48 hrs.	14 days
70°F	12 hrs.	24 hrs.	7 day
80°F	6 hrs.	12 hrs.	4 days
90°F	3 hr.	6 hrs.	2 days

Maximum Recoat

Surface Temperature	Time
50°F	5 days
75°F	48 hours
90°F	24 hours

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 3 or MEK.

NOTE: Much of the information listed on this data sheet is for general guideline purposes. For specific projects, refer to the specification for detailed instructions. If a specification is not available, contact your U.S. Coatings representative.

Rev. 2/18/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS COMBUSTIBLE LIQUIDS. OSHA CLASS IIIA LIQUIDS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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GripLine 6700

High Solids Novolac Epoxy Tank Lining

Features

- Meets FDA 21CFR 175.3000 for direct food contact
- CUI (Coating Under Insulation)
- Temperature resistance to 450°F
- Resists boiling water
- Excellent thermal shock resistance
- Semi-gloss finish
- VOC compliant
- High solids formulation
- Excellent build on edges
- Ambient temperature cure
- Blush resistant during cure
- Easy to apply

Typical Uses

GripLine 6700 is used as a tank lining, under insulation or maintenance coating for highly corrosive environments. Used to line steel tanks and to coat structural steel for offshore platforms, barges, refineries, petrochemical plants, power plants, railcars, pulp & paper mills, and other areas as recommended. When used under insulation GripLine 6700 offers outstanding resistance to wet & dry cycling at high (450°F) temperatures.

Physical Data

Abrasion resistance (ASTM D 4060)	
1 kg load/1000 cycles (ASTM D 4060)	weight loss
CS 17 wheel	60 mg
Impact resistance (ASTM D 2794)	
Direct impact	80 in-lbs.
Adhesion (ASTM D 4541)	3913 psi
Temperature resistance (non-immersion)*	
Continuous	425°F
Non-continuous	450°F
*Discoloration and loss of gloss may occur above 250°F	
Theoretical volume solids of mixed material	80%±1%
Theoretical coverage of mixed gallon (1 mil)	1283 sq. ft.
Volatile Organic Content	
Unthinned	0.8 lbs./gal.
Reducer 5 @ 1 pint/gal.	0.8 lbs./gal.
Reducer 7 @ 2 pints/gal	2.2 lbs./gal

Resistance

GripLine 6700 is resistant to a wide range of chemicals in atmospheric and immersion exposures. The following is a guide to the proper selection.

Exposure	Immersion	Splash & Spillage	Fumes
Acidic	Excellent	Excellent	Excellent
Alkaline	Excellent	Excellent	Excellent
Solvents	Good	Excellent	Excellent
Salt water	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

Film Thickness (per coat)

Dry film thickness: 8 to 10 mils
Wet film thickness: 10 to 12 mils
Theoretical coverage: 160 sq. ft. @ 8 mils DFT.

Substrates

GripLine 6700 is applied directly to steel as recommended.

Topcoats

GripLine 6700 is normally topcoated with itself and does not require additional topcoats.

Colors

GripLine 6700 is available in white and medium gray. Normally the white is used as the primer to provide color contrast with the steel surface and gray topcoat.

Shipping Data

Packaging unit	1 gal.	5 gal.
Base	0.89 gal.	4.45 gal.
Converter	0.11 gal	0.55 gal.
Shipping weight (approx.)		
Package unit	12 lbs.	60 lbs.
	1 gal.	5 gal.
Reducer 5	12 lbs.	60 lbs.
Reducer 7	9 lbs.	45 lbs.
Flash Point: (Setaflash)		
Base	0°F	
Converter	Above 200°F	
Reducer 7	100°F	
Reducer 5	0°F	

Shelf Life: 3 years for both the base and the converter when stored inside at 40°F to 110°F.

GripLine 6700

Surface Preparation

Remove oil and grease from the surface with solvent or a commercial cleaner, which does not leave a residue according to SSPC-SP1.
Steel: Immersion Service: Abrasive blast to a White Metal cleanliness according to SSPC-SP 5 to achieve 1.5 – 3 mil anchor profile.
Non-immersion Service: Abrasive blast to Near White Metal cleanliness according to SSPC-SP10 to achieve 1.5 – 3 mil anchor profile

Mixing

Power mix the Base component, then blend Converter into the Base and mix until uniform at the following ratio:

	1 Gal. Kit	5 Gal. Kit
GripLine 6700 Base	.89 gallon	4.45 gallon
GripLine 6700 Converter	.11 gallon	0.55 gallon

Thinning

GripLine 6700 may be thinned up to 1 pint/gal. with Reducer 5. For application to a hot surface Reducer 7 is recommended.

Pot Life

Four hours at 75° and less at higher temperatures. Pot-life ends by the loss of film build.

Applications Conditions

	Material	Surface	Ambient
Minimum	50°F	50°F	50°
Maximum	90°F	110°F	110°F

Special thinning and application procedures are required outside these temperatures. Surface temperatures should be 5°F above dew point to prevent condensation.

Application Equipment

Conventional Spray: Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62 having double regulated pressure pot, 3/8' I.D. minimum material hose and a .070" I.D. fluid tip and air cap are recommended.
Airless Spray: Sprayer such as Graco's Bulldog with a 30:1 ratio and a .017" to .021" tip is recommended. A 30 mesh inline filter is recommended.
Power Mixer: Use only explosion proof power mixers.
Brush or Roller: Use medium brush and short nap roller with solvent resistant fibers and core.

Drying Time

The following minimum times are based on a 10 mils DFT and adequate air ventilation. Higher thickness and reduced air circulation increase drying times.

Surface Temperature	To Touch	To Recoat	Final Cure
60°F	16 hrs.	72 hrs.	14 days
75°F	8 hrs.	36 hrs.	7 day
90°F	4 hrs.	18 hrs.	4 days

Elevated temperature final cure will increase the resistance of GripLine of GripLine 6700. For severe or food service, a final cure of 200°F for 12 hours is recommended.

Maximum Recoat

Surface Temperature	Days
60°F	14
70°F	7
80°F	4
90°F	1

If the maximum recoat time is exceeded, the coating should be sweep blasted with fine aggregate to roughen the surface.

Cleanup

Cleanup with Reducer 5 or acetone.

Rev. 6/25/14
CAUTION: Read and follow all caution statements on this product data sheet and on the Material Safety Data Sheet for this product.
CONTAINS FLAMMABLE SOLVENTS. Vapors are heavier than air and will accumulate. Extinguish all flames and prevent all sparks. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Where explosion hazards exist workers are required to use non-sparking tools and wear non-sparking shoes.
HEALTH: In confined spaces workers must wear fresh airline respirators.
WARRANTY: Any recommendation of U.S. Coatings contained herein, covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however U.S. Coatings makes no warranty or representation with respect thereto. Use or application is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Coatings.

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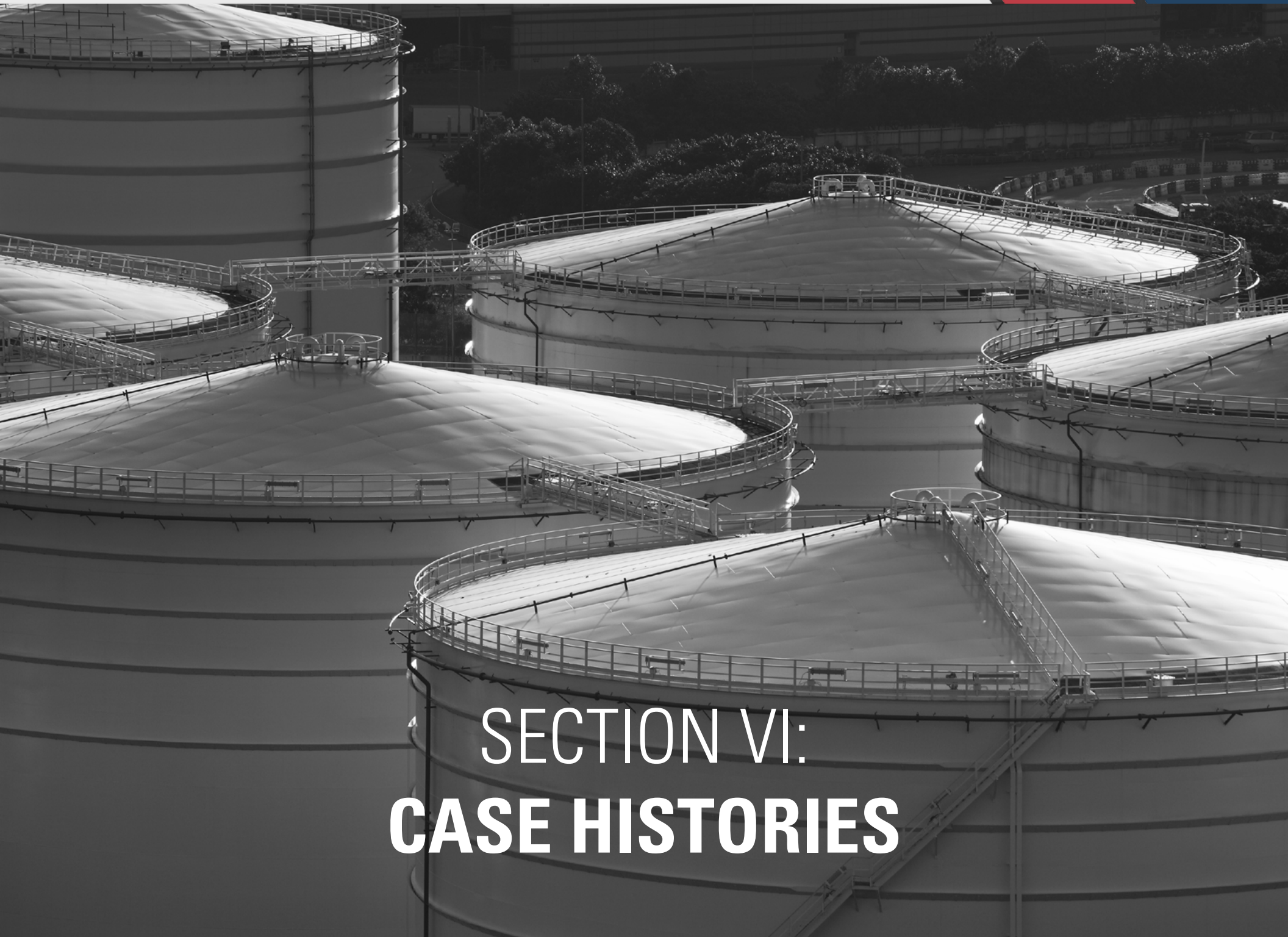


SECTION VI:
CASE HISTORIES

Raw Water Tank: Midwest Power Plant

SURFACE PREP:
Interior – White Metal Blast

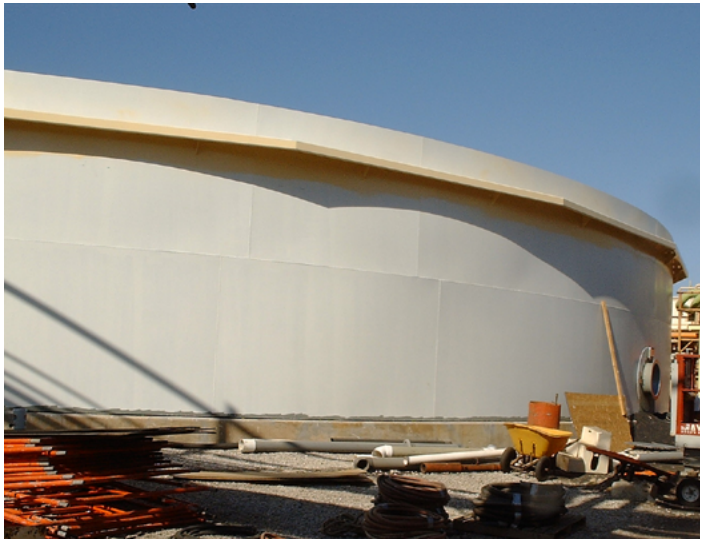
APPLICATION METHOD:
Interior – Plural Component Airless Spray

COATING SYSTEM:
Primer:
Interior – None
Interior Ladder – GripLine 6130

Intermediate:
Interior – None
Interior Ladder – GripLine 6130

Finish:
Interior – GripLine 6400
Interior Ladder – GripLine 6130

Crude Oil Storage Tank: Sunoco Logistics Nederland, TX



SURFACE PREP:
White Metal Blast SSPC-SP5

APPLICATION METHOD:
Plural Component Heated Pump

COATING SYSTEM:
One Coat:

GripLine 6200 at 30 to 35 mils

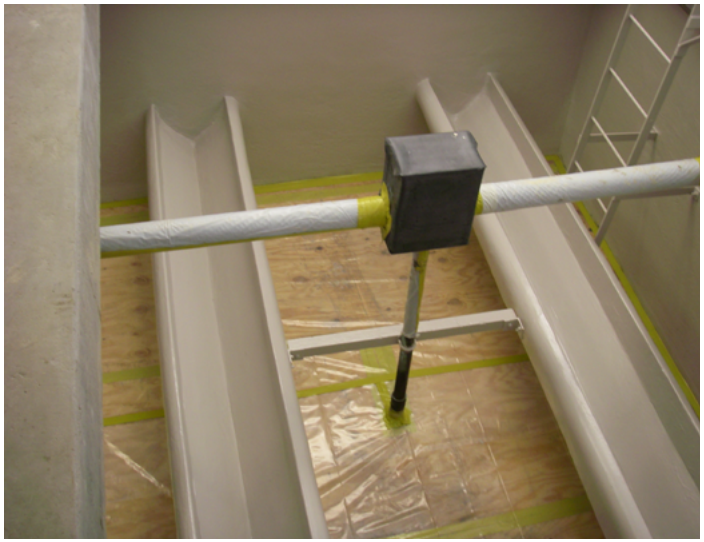
Potable Water Storage Tank
City of Alsip, IL

CONTRACTOR:
Thomas Industrial Coatings

COMPLETION DATE:
Fall 2007

COATING SYSTEM:
Interior:
GripLine 6450
Exterior Primer:
EpoxyGrip 2000
Exterior Intermediate:
MultiGrip 7000XP
Exterior Finish:
MultiGrip 7000XP Clear

Potable Water Filter Beds: Memphis Light, Gas & Water
Memphis, TN



CONTRACTOR:
General Construction Services

COMPLETION DATE:
Spring 2011

COATING SYSTEM:
AquaGrip 2600 Grout
GripLine 6450