ChemLINE® HS (High Solids) is a high functionality, two component thermoset polymer coating. When cured, the ChemLINE® HS high cross link density is unlike other coatings. ChemLINE® HS delivers significantly improved product performance and anti-corrosion resistance. ChemLINE® HS coating is formulated with a unique polymer designed and engineered with high functionality. This bridged aromatic backbone structure, when polymerized, forms a tightly knit screen-like structure. ChemLINE® HS crosslinks predominately through an ether (carbon-oxygen-carbon) linkage. This eliminates high concentrations of hydroxyl groups (found in epoxies) and precludes formation of ester groups (found in vinylesters) that are subject to hydrolysis and acid attack. ChemLINE® HS can be ambient cured or low temperature forced air cured depending on substrate and service conditions.

ChemLINE® HS’s Higher Cross-Link Density Means:
- Higher chemical resistance
- Higher resistance to abrasion
- Higher toughness
- Higher heat resistance

Provides Superior Chemical Resistance to:
- 1-99% Sulfuric Acid
- 37% Hydrochloric Acid
- 50% Sodium Hydroxide
- Methanol
- Acetic Acid
- Methylene Chloride
- Most acids, alkalies, and solvents

Industry Applications
- Transportation Equipment - Rail tank and hopper cars, over-the-road tankers, barge tankers, tank containers (ISO tanks)
- Chemical Processing - Tanks, vessels, hazardous waste, secondary containment, chemical plant floors, etc.
- Paper & Pulp - Digesters, black liquor tanks, bleaching, etc.
- Mining - Acid tanks, scrubbers, etc.
- High Technology - Clean rooms, floors, etc.
- Power Generation - FGD systems, ducts and stacks, etc.
- Steel - Pickling tanks, acid storage, acid waste neutralization,
- Waste Water - Tanks, clarifiers, flocculation basins, neutralization chambers, concrete containment, etc.

Product Highlights
- Superior corrosion resistance, exceptional toughness
- Superior bonding qualities
- Applied to pitted and/or corroded steel
- Maximum versatility; product cycling
- Ambient or low temperature forced air cure
- Low VOC - 32 grams/L (0.26 lbs. per gallon)
- Virtually non-permeable, steam cleanable, and field repairable
- Resists hydroblasting
- Excellent UV resistance
- Complies with FDA regulations
- ChemLINE® is generally recognized as safe (GRAS) for food grade cargoes
- High impact resistance
- Dry heat resistance to 400° F (204° C)
- One or two coat application

Typical Properties (mixed, as supplied)
- Stock Colors ___________________________ Blue, Grey, Red, White
- V.O.C. Level/Gal. ___________________ 32 grams/L (0.26 lbs./gal.)
- Solids by Volume ____________________________ 96.0%
- Recommended Film Thickness (dry) mils average
  - ___________ Steel: 12 mils (300 microns)
  - ___________ Concrete: 20 mils (500 microns)
- Shelf Life _____________________________ 12 months

For product recommendations and technical, application and heat curing information contact Advanced Polymer Coatings’ customer service. Contact +1 440-937-6218.
### Superior Corrosion Resistance Performance

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<thead>
<tr>
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<tbody>
<tr>
<td>Acetic Acid</td>
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<td>Acrylic Acid</td>
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<td>Benzene</td>
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<td>Benzene Carboxylic Acid</td>
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<td>Benzoyl Chloride</td>
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<td>Bromine</td>
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<td>Calcium Hydroxide</td>
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<td>Cresol</td>
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<td>Fatty Acid, Palm</td>
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<td>Glycerol</td>
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### Problems with Vinylester and Epoxy

**Open Screen Structures**
- Aggressive Chemical Molecules
- Substrate Corrosion

**ChemLINE® Closed Screen Structure**
- Aggressive Chemical Molecules cannot penetrate into and through the polymer groups attacking both the inner polymer structure and the substrate.

### Higher chemical resistance
### Higher temperature resistance
### Resistance to permeation (absorption)

### This is Only A Reference Guide.
Contact your ChemLINE® Representative or the ChemLINE® Customer Service Hotline +1 440-937-6218 for detailed specifications prior to any final coatings recommendation or application.
WHO: Matlack Leasing is a leading North American lessor of OTR tank trailers and tank containers serving tank operators, motor carriers, manufacturers, and chemical, petrochemical, agricultural, and environmental service companies.

SERVICE: Matlack carries 30-70% Sulfuric and other acids, corrosives, hazardous waste, petroleum products, and chlorine. Customers want the ultimate in protection for these tanks, to prevent unwanted corrosion, to ensure product (cargo) purity, and to extend the service life of the units.

HISTORY: Matlack has used a range of lining technologies such as rubber, fiberglass reinforced products, Kynar®, Teflon®, and other various epoxy and phenolic epoxy coatings. Each lining system has presented different challenges and no single lining was versatile enough to cover a wide breadth of cargoes carried. Some of these lineings have also been very expensive to install and maintain.

THE SOLUTION: Matlack now specifies the ChemLINE® tank lining to prevent unwanted corrosion to extend the service life of its tanks. ChemLINE® offers a superior solution at a competitive price and is versatile by being able to carry a large footprint of cargoes, including food grade products.

“We know when ChemLINE® tanks are properly maintained, they outlast all other linings. Usually a flush wash or rinse is enough for a ChemLINE® cleaning.”
- Matlack Leasing Director National Operations & Technical Services

(PHOTO 1) Interior pitted tank with corrosion prior to ChemLINE® application. (PHOTO 2) Finished tank with ChemLINE® coating.

(PHOTO 3) Manway lid showing corroded rubber lining, due to HCl exposure.

(PHOTO 4) Manway lid and surrounding spill area properly protected with ChemLINE® coating.
ChemLINE® HS
High Solids

A History of Performance

For more than a decade ChemLINE® coatings have withstood the tremendous stresses and extremes of chemical attack and abrasive wear. ChemLINE® has been proven worldwide under the most arduous operating conditions, from resisting the most aggressive chemicals to handling hot pipelines in sub-freezing temperatures, with a history of success. Based on this experience, the development of ChemLINE® 784 HS represents a quantum leap in chemical resistant polymer coatings.

Add to Your Profits — Specify ChemLINE® 784 HS

For the full story on ChemLINE®, contact APC or click onto our web site at www.adv-polymer.com for the most versatile, technologically advanced and cost effective protection available.

The information contained in this brochure is intended to show the broad range of applications where Advanced Polymer Coatings’ products have been used. This brochure is not an offer to sell any product. The information provided is not a warranty that Advanced Polymer Coatings’ products are suitable for any specific service condition. All products sold by Advanced Polymer Coatings come with a warranty that the product supplied is suitable for the service condition disclosed by the customer prior to sale when properly applied. Advanced Polymer Coatings will not warrant the quality of the application work performed by others and shall have no liability for in service product failures resulting from improper application. Advanced Polymer Coatings offers a range of products for different service conditions. The information given at the time of sale is the sole and exclusive warranty provided by Advanced Polymer Coatings. ALL IMPLIED WARRANTIES ARE DISCLAIMED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. The products sold by Advanced Polymer Coatings are not intended for personal or household use. Advanced Polymer Coatings’ products should only be used by professional applicators who have familiarized themselves with the written Manufacturer Safety Data Sheets and Application Guidelines available at www.adv-polymer.com.

Advanced Polymer Coatings shall, in its discretion, provide an alternative product or refund the purchase price and freight charges it received for the product. The replace or refund warranty given at the time of sale is the sole and exclusive warranty provided by Advanced Polymer Coatings.

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