

ChemLINE® 784 ES

Elevated Service



A coating with superior chemical resistance and high temperature resistance.

Description

ChemLINE® 784 ES (Elevated Service) delivers significantly improved product performance and anti-corrosion resistance. ChemLINE® 784 ES is formulated with unique polymer technology, designed and engineered with 28 functional groups per molecule. This translates in up to 784 cross links versus four (4) for high temperature epoxies.

ChemLINE® 784 ES's Higher Cross Link Density Means:

- ▶ Higher chemical resistance
- ▶ Higher temperature resistance
- ▶ Higher reactivity at lower temperature
- ▶ Higher resistance to absorption
- ▶ Higher toughness

Industry Applications

- ▶ **Chemical Processing** - Tanks, flare tanks, reactor vessels, hazardous waste hauling, etc.
- ▶ **Paper & Pulp** - Digesters, black liquor tanks, bleaching, etc.
- ▶ **Steel** - Pickling tanks, acid storage, acid waste, neutralization, etc.
- ▶ **Mining** - Acid tanks, scrubbers, etc.



More Chemical Resistance Than:

- ▶ Stainless steel
- ▶ Phenol epoxies
- ▶ Vinylesters
- ▶ Phenolic

Product Highlights

- ▶ Superior bond strength and adhesion
- ▶ Maximum product flexibility, product cycling
- ▶ Field repairable
- ▶ Low VOC - 143 grams/L (1.19 lbs. per gallon)
- ▶ Can be applied to pitted and/or corroded steel
- ▶ Steam cleanable
- ▶ Complies with FDA 21CFR 175.300
- ▶ Non-permeable for product purity

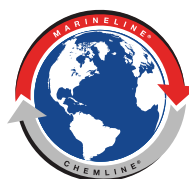
ChemLINE® 784 ES Provides Superior Resistance To:

- ▶ Acids, alkalis and solvents
- ▶ Thermal cycling -40°F to 400°F (-40°C to +204°C)
- ▶ Good flexibility
- ▶ Wear and abrasion resistant
- ▶ Minimal product absorption
- ▶ Impact resistant
- ▶ Resists under-creep corrosion
- ▶ Dry heat resistance to 500°F (260°C)

Typical Properties (mixed, as supplied)

- ▶ Stock Colors _____ Gray, Red
- ▶ V.O.C. Level/Gal. _____ 143 grams/L (1.19 lbs./gal.)
- ▶ Pot Life _____ 120 minutes @ 75°F (24°C)
- ▶ Viscosity Reduction _____ Reduce with Toluene or Xylene
- ▶ Solids by Volume _____ 84%
- ▶ Recommended Film Thickness (dry) mils average _____ Steel: 12 mils (300 microns)
- ▶ Shelf Life _____ 12 months

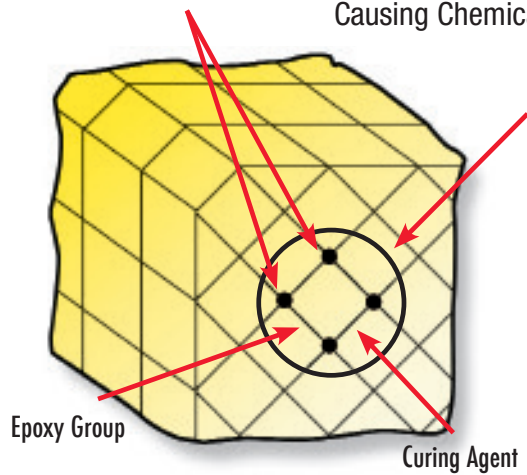
For product recommendations and technical, application and heat curing information contact Advanced Polymer Coatings' customer service. Contact +1 440-937-6218.



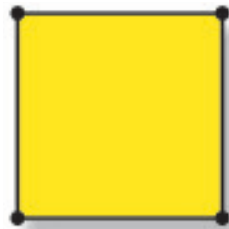
**ADVANCED
POLYMER COATINGS**

The Technology; Epoxies, Vinylesters and ChemLINE® 784 ES Form 3 Dimensional Screen-Like Structures when Cured

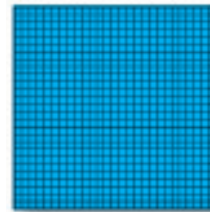
The Greater the Distance Between the Cross links, the Greater the Permeation Causing Chemical Attack and Absorption



The Following Diagrams Represent the Same Coating Cutaway (pictured left)



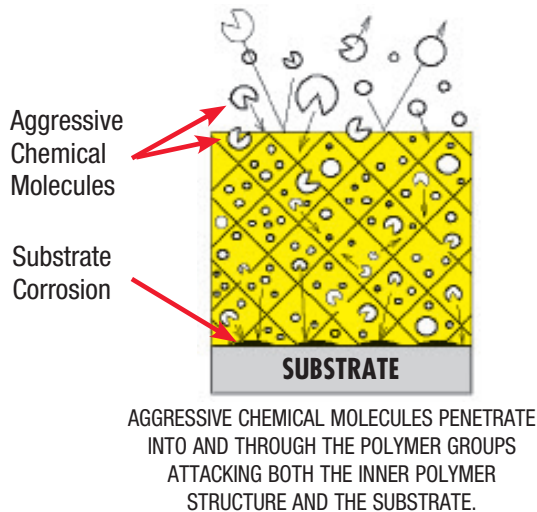
Epoxy
2 Functionality
Forms 4 Cross-links



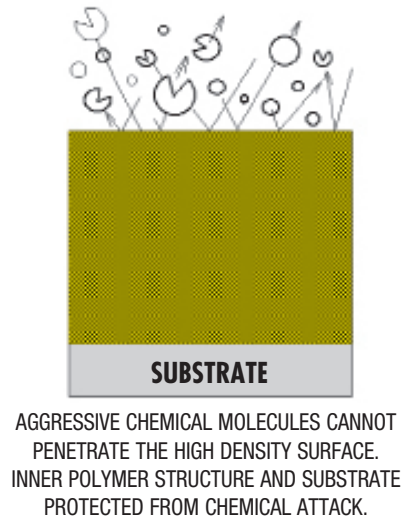
ChemLINE® 784
28 Functionality
Forms up to 784 Cross links,
the Highest Cross link Density

Problems with Epoxies and Vinylesters

Vinylester's and Epoxy's Open Screen Structure



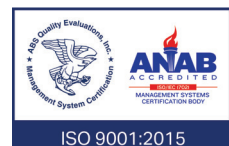
ChemLINE 784 ES's Closed Screen Structure



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Advanced Polymer Coatings
Avon, Ohio 44011 U.S.A.
+1 440-937-6218 Phone
+1 440-937-5046 Fax
800-334-7193 Toll-Free USA & Canada

www.adv-polymer.com

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