# ChemLINE<sup>®</sup>LE

A protective lining for superior corrosion and high temperature resistance with exceptional flexibility and toughness.



#### **Description**

ChemLine® LE coating is specially formulated polymer resin for handling the high temperature and abrasion requirements of the power industry. ChemLine<sup>®</sup> LE is a two-component force cure system that offers unique characteristics. ChemLine® LE is a cross-linked organicinorganic multifunctional polymer coating that is cured though homopolymerization. This dense crosslinked polymer exhibits high flexibility and toughness, having no detrimental hydroxyl or ester groups. Due to ChemLine<sup>®</sup> LE's temperature resistance of 500°F (260°C), it provides superior resistance to:

- Acids, alkalies, solvents, oxidizing agents
- Good wear and abrasion resistance
- Impact resistance
- Thermal cycling -40°F (-40°C) to 500°F (260°C)

#### **Industry Applications**

- Stacks
- Chimneys
- Ducts
- Flue gas desulfurization scrubbers
- Chemical scrubbers
- Pre-scrubbers
- Spray towers
- Fans



#### Application Highlights

- Excellent resistance to hot flue gas condensate
- Resists fly ash abrasion
- Low coefficient of thermal expansion
- Smooth, low surface energy reduces fly ash buildup in ducts and stacks
- Applied to pitted corroded steel
- Very low VOC 99 grams/L (0.80 lbs.per gallon)
- Outstanding flexibility
- Resists hydroblasting
- ► Field repairable
- Coefficient of thermal expansion comparable to stainless steel
- Dry heat resistance up to 500°F (260°C)

#### **Typical Properties**

- Stock Colors\_\_\_\_\_ Gray, Red
- ► V.O.C. Level/Gal. \_\_\_\_\_ 99 grams/L (0.80 lbs./gal.)
- Lead Content \_\_\_\_\_ Zero
   Chromate Content \_\_\_\_\_ Zero
- ▶ Pot Life \_\_\_\_\_\_ 120 minutes @ 75°F (24°C)
- Viscosity Reduction
  Reduce with Toluene or Xylene
- Solids by Volume \_\_\_\_\_ 90.0%
- Recommended Film Thickness (dry) mils average

Steel: 16 mils (400 microns)

- \_\_\_\_\_ Concrete: 24 mils (600 microns)
- ► Shelf Life \_\_\_\_\_12 months

For product recommendations and technical, application and heat curing information contact Advanced Polymer Coatings' customer service. Contact +01 440-937-6218.



## Typical FGD Schematic (non-denominational) Showing Various Lining Zones for ChemLine<sup>®</sup> LE



### **Explanation of Above Codes Used to Define Living Environment**

Code	(1) Corrosion	(2) Erosion	(3) Temperature	Recommendation
А	Mild Corrosive (Vapor)	Mildly Abrasive	High	ChemLine <sup>®</sup> LE
В	Moderate (Immersion)	Mild	Mild	ChemLine <sup>®</sup> LE
С	Moderate	Moderate	Mild	ChemLine <sup>®</sup> LE
D	Moderate	Severe	Mild	ChemLine <sup>®</sup> LE
E	Severe	Mild	Moderate	ChemLine <sup>®</sup> LE
F	Severe	Mild	Severe	ChemLine <sup>®</sup> LE
G	Severe	Severe	Severe	ChemLine <sup>®</sup> LE

Key 1) Corrosion - Mild 30% to 80% Sulfuric Acid (Severe)
2) Erosion - High Energy Fly Ash Particles
3) Temperature - Mild 200°F (93°C) to 350°F (177°C) (Severe)

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