



# InsulCorr™ SP827

## Silicone Co-Polymer CUI Coating System

### DESCRIPTION

InsulCorr™ SP827, is a single-component, VOC compliant, self priming, high temperature coating system designed to protect carbon and stainless steel surfaces from atmospheric and corrosion under insulation.

SP827 provides corrosion protection in high temperature service environments exposed to thermal shock and thermal cycling of intermittent wet and dry conditions.

The self priming and self curing property of the coating allows for fast and economical application of the coating without post heat curing.

The superior adhesion and barrier property of the SP827 technology makes it an excellent choice to reduce corrosion activity in under insulation service. The SP827 technology retains its physical properties over time and will not degrade with high temperature service.

### BENEFITS

- Insulated surfaces
- Hot piping
- Process vessels
- Refinery equipment
- Boiler casings
- Stacks
- Manifold
- Exhaust systems

### FEATURES

- Low VOC
- Self priming
- Single component
- Apply by brush, roll or spray
- Includes dry fall technology
- Temperature resistant to 640 °C
- Ambient air dry
- Protects against high temperature corrosion

### Physical Property

Physical Property	Result
Chemistry	Hybrid Multi Polymeric Matrix
Gloss	Flat
Color	Charcoal
No. of Components	1
Priming	Self priming
Max Temperature (ASTM D2485)	650 °C
Viscosity (Stormer)	900 - 1200 cps
Carrier Solvent	Solvent blend
Solids Content	> 50 % by volume
Theoretical coverage	21 sqm/liter/25 microns
Salt Fog (ASTM B-117)	> 1,000 hours
Abrasion resistance (ASTM D4080)	< 200 mg loss
Elongation (ASTM D-638)	> 10 %
Hardness (ASTM D3363)	2H

### Application Property

Application Property	Result
Dry to Touch	20 minutes
Tack Free	30 minutes
Dry to Handle	6 hours
Minimum Recoat Time	6 hours
Maximum Recoat Time	5 days
Return to Service	24 hours
Cure Rate	24 hours ambient cure, <i>*Elevated temperature cure to 140 °C will enhance performance properties</i>
Recommended Film Thickness	100 to 150 microns per coat. 2 coats to a final thickness of 200 to 300 microns

### Method of Application

Airless spray:	minimum Graco 30:1
Tip size	315-517
Pump fluid pressure	2000 psi
Hose	9.5 mm internal diameter
Clean up	Xylene

## MIXING INSTRUCTION

InsulCorr SP827 is a single-component system. THIS PRODUCT CONTAINS HEAVY LOADING OF ADDITIVES. SETTLING IN THE PRODUCT IS COMMON. THE PRODUCT SHOULD BE MIXED FREQUENTLY DURING APPLICATION. Mix contents for 2 to 3 minutes until a uniform colour and consistency is achieved and the product is well dispersed. To ensure complete mixing, scrape sides and bottom of container and continue mixing for an additional 1 or 2 minutes.

DO NOT HAND MIX.

DO NOT THIN THE COATING.

Begin application immediately – no induction time.

Skinning of the product may occur if left open for a period of time.

## SURFACE PREPARATION

- 1) Ensure that surface is clean, dry and uncontaminated. Proceed only if the substrate temperature is more than 3°C above the dew point temperature during surface preparation and coating application.
- 2) Abrasive blast clean with abrasive media (30/60 or coarser) garnet, aluminum oxide or appropriate media to achieve the cleanliness and angularity required DO NOT USE steel shot or non-angular media.  
For steel surfaces, blast to a White Metal Blast (SSPC-SP5; NACE 1; SA 3):
  - minimum 50 microns (2 mils) to 75 microns (3 mils) profile for high temperature service.
- 3) For small areas repairs when abrasive blasting is not feasible, Power Tool cleaning SSPC SP3 is an acceptable method.

## APPLICATION INSTRUCTIONS

Remove all screens and filters on spray machine and spray gun. Prime the pump with clean solvent and then feed the coating material. Recirculate the material into the pail without the gun to allow the material to flow through the hose and remove any debris.

Reduce the coating thickness in colder weather or high humidity environments to improve the coating dry time.

Heating the substrate and good air movement will assist with the coating dry times and allow for faster recoat.

**Application Temperature:** Surface 10°C minimum, 200°C maximum  
Air and material 10°C minimum, 49°C maximum

*Consult with Manufacturer for application surface temperatures above 50°C.*

**Dew Point:** Surface temperature must be at least 3°C above dew point

## CLEAN UP AND STORAGE

Clean up with Xylene or other manufacturer recommended solvent

Store between 16 °C and 32 °C

Shelf life is 18 months

## SAFETY

Before using any products, please refer to the Material Safety Data Sheet (MSDS).

Wear eye safety protection, chemical resistant gloves. Use NIOSH approved respirator.

Adequate ventilation is required. Do not use in confined space. If inadequate ventilation - air fed respirators must be worn

This product contains flammable materials. Keeps away from sparks and open flames. NO SMOKING in the vicinity.

The information contained in this document may change at any time. Please contact us for the most up to date version. Technical data results reflects laboratory tests and is intended to indicate general characteristics only. Furnace Mineral Products Inc., disclaims all warranties expressed, or implied, including warranties of merchantability and fitness for a particular purposes or use. Liability, if any, is limited to product replacement only.