# **350-INS Series** HiTemp Thermal Insulating Coating



Highland 350-INS HiTemp Thermal Insulating Coating is a composite ceramic insulation coating system. The coating provides an insulating barrier, protects personnel and helps prevent or reduce condensation formation all in one product. Microscopic air filled ceramic particles blended with premium acrylic resins provide substantial temperature differentials in relatively thin films. Highland 350-INS eliminates the need for conventional insulation and jacketing for process equipment and piping.

#### **Tech Specs**

| Heat Resistance:      | 350°F Constant             |
|-----------------------|----------------------------|
| Vehicle Type:         | Composite Ceramic          |
| Reducer:              | Not Recommended            |
| Mix Ratio:            | Single Package             |
| Pot Life:             | N/A                        |
| Volume Solids:        | 65%                        |
| Theoretical Coverage: | 1042ft² /gal. @ 1 mil DFT  |
| VOC:                  | <25 g/L                    |
| Flash Point:          | None                       |
| Dry Film Thickness:   | Up to 40 mils DFT per coat |
| Wet Film Thickness:   | Up to 61 mils WFT per coat |

| Dry-time:   | Normal                             |  |
|---|------------------------------------|--|
| To Touch:   | 1 Hour                             |  |
| To Recoat:  | 4 hours for 1st coat, 16 hours for |  |
| Subsequent Coats - For high humidity situations (>70%) wait |                                    |  |
| 24 hours between all coats.                                 |                                    |  |
| Shelf Life:   | 1 Year Minimum                     |  |
| Finish:   | Flat                               |  |
| Color:  | Off White & Gray                   |  |
| Packaging:  | 1 & 5 gallon pails                 |  |
| Storage Temperature:  | 35°F - 110°F                       |  |
| Application Temp:   |                                    |  |
| Ambient:  | 50°F Minimum                       |  |
| Substrate:  | 50°F - 120°F                       |  |

## **Surface Preparation**

All surfaces should be clean, dry and free of all foreign contaminants.

Apply over Highland approved primer. Consult Highland technical data sheet for recoat windows on approved primer before application.

See typical systems for primer options.

# **Mixing & Application**

Mixing: Highland 350-INS Series needs to be thoroughly mixed using mechanical agitation. Use only mud mixing paddles with a drill motor set on low speed. Mix to a uniform heavy bodied, creamy appearance.

Reduction: Not Recommended

Airless spray is the best method of application. Brush and roller application should only be used for small touch-up areas. To ensure optimal performance, apply according to recommendations below.

| Airless Pump: | Titan Speedflo Powrtex 1200SF | Brush or Roller: | Touchup Only |
|---------------|-------------------------------|------------------|--------------|
| Gun:          | S-5                           |                  |              |
| Strainer:     | Remove                        | Clean Up:        | Water        |
| Pressure:     | 2200 PSI                      |                  |              |
| Tip Range:    | .027 – .031                   |                  |              |

## Typical Systems

Apply 350-INS Series at up to 200 mils DFT (40 mils DFT maximum per coat) over one of the following primers.

| 74-HF Series Primer  | 350°F Epoxy Novolac Primer                |
|----------------------|---|
| 860-HF Series Primer | 400°F Modified Silicone Primer            |
| 827-HB Series Primer | 1200°F Inert Multipolymeric Matrix Primer |

## Safety Information

- Use normal precautions such as gloves, facemasks and barrier creams.
- Adequate ventilation must be maintained. In confined areas, applicators must wear constant flow airline respirators.
- If product comes into contact with skin, wash thoroughly with lukewarm water or diluted Boric Acid, and obtain immediate medical attention.
- This product contains FLAMMABLE materials. Keep away from sparks and open flames. Observe NO SMOKING regulations.
- All electrical equipment and installations should conform to NEC regulations. In areas where explosion hazards exist, applicators should be required to use nonferrous tools, and to wear conductive, non sparking shoes.
- Observe low flash regulations.
- Refer to Safety Data Sheet (SDS) for complete safety instruction

#### Precautions

- CAUTION! Do not take internally.
- Close container after each use.
- Protect from freezing
- Read SDS before opening containers.

The technical data listed herein has been compiled for your convenience and guidelines are based upon our experience and knowledge. However, since we have no control over the use of this information or this product, no warranty expressed or implied is intended or given. Highland assumes no responsibility whatsoever for coverage, performance or any other damage, including injuries from use of this information or products recommended herein.