



# Highland International

## Engineered Paint Systems

HiTemp INS  
350-INS Series

**Highland INS Hi-Heat 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 INS eliminates the need for conventional insulation and jacketing for process equipment and piping.

<b>Reducer:</b>	Water
<b>Mix Ratio:</b>	Single Package
<b>Pot Life:</b>	N/A
<b>Volume Solids:</b>	65%
<b>Temperature:</b>	350°F Maximum
<b>Coverage:</b>	26 sq. ft./gal (0.64m <sup>2</sup> /L) max per coat applied in multiple passes
<b>VOC:</b>	25 g/L
<b>Flash Point:</b>	None
<b>Recommended DFT</b>	(0.64m <sup>2</sup> /L) max per coat applied in multiple passes
<b>Dry-time:</b>	<u>@77°F &amp; 50% RH</u>
<b>To Touch:</b>	1 Hour

<b>To Recoat:</b>	4 hours for 1st coat 16 hours for Subsequent Coats
For high humidity situations (>70%) wait 24 hours between all coats.	
<b>Shelf Life:</b>	1 Year Minimum
<b>Finish:</b>	Flat
<b>Color:</b>	Off White & Gray

Personnel Protection Chart:  
(Per ASTM-C1055)

100°F-250°F . . . . .	80	to 100 mils
250°F-300°F . . . . .	120	to 150 mils
300°F-350°F . . . . .	150	to 200 mils

### Surface Preparation

Surface preparation should be carried out according to good painting practices. All dirt, grease, oil, wax, other foreign matter must be removed before applying Highland INS.

A minimum requirement for carbon steel is an SSPC SP3 power tool cleaning, the preferred method for longest service life would be SSPC SP6, commercial blast cleaning. For non-ferrous metals, Highland INS can be applied direct to metal. For ferrous metals, the use of approved Highland primer is recommended prior to the application of Highland INS.

#### PREVIOUSLY PAINTED SURFACES:

Highland INS may be applied directly to existing paint that is tightly adherent and in good condition. All glossy surfaces should be dulled with sandpaper.

Highland INS may be topcoated with approved Highland Topcoat

### Recommended Uses

Personnel protection, piping, air and heat duct work, exposed water pipes, steam lines, heat exchangers, tanks, boilers and any surfaces which require insulation or condensation control.

**USED BY:** LNG pipelines and vessels, power plants, refineries, Factories, Warehouses, Utilities, Railroad and other Transportation Companies, Oil and Chemical Installations, Military Installations, and other facilities where personnel protection, insulating and or condensation control coatings are required. Provides excellent thermal insulation. Significantly reduces or eliminates the possibility of condensation.

### Mixing and Application Requirements

Highland INS must be mixed before use. Use only mud mixing paddles with a drill motor set on low speed. Mix to a uniform heavy bodied, creamy appearance. Airless spray is the best method of application. Brush and roller application should only be used for small touch-up areas. Do not apply in temperatures below 50°F (10°C).

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.



# Highland International Engineered Paint Systems

**HiTemp INS  
350-INS Series**

## Method of Application

### Texture Rig

Titan Speedflo Powrtex . . . . . 1200SF  
 \*Maximum Pressure . . . . . 2200 psi  
 Strainer . . . . . Remove  
 Gun . . . . . S-5  
 Tip . . . . . .027 - .031

Reduction . . . . . Not Recommended

\* Do not exceed maximum pump pressure regardless of the maximum pressure capacity of the pump. Pressures exceeding 2400 psi may compromise the coatings insulating performance.

## Safety Precautions

**CAUTION! Do not take internally. Close container after each use.**

**Protect from freezing**

**Read MSDS before opening containers.**

**KEEP OUT OF REACH OF CHILDREN**

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.