



## InsulCorr™ IC

waterborne insulation coating

### DESCRIPTION

INSULCORR™ is a high build single component multi polymer acrylic resin matrix incorporating insulating, blocking and reflective agents to reduce the transfer of heat.

InsulCorr is designed to provide an economical and fast turnaround approach to thermal and acoustical insulation for industrial applications. The ability to spray on an insulation coating versus conventional batting or jacketed lay up insulation methods, saves you time and money. Insulating complex components becomes seamless and simple.

The superior adhesion property of the InsulCorr technology allows the coating to be applied to substrates surface with minimal surface preparation. The wetting and anti corrosion characteristics of the coating makes it an excellent choice to reduce corrosion activity. Conventional insulation often becomes wet and worn over time, diminishing its insulative value and exposing the substrate to corrosion activity. The InsulCorr technology retains its physical properties over time and encapsulates the component providing an effective barrier against corrosion.

Reducing the surface temperature of industrial components to safeguard employees is an added benefit to this economical coating system.

### BENEFITS

- Personnel protection
- Energy savings
- Mitigates condensation
- Sound dampening
- Eliminates multi step insulating methods
- Excellent adhesion
- Reduces heat loss
- Improves temperature uniformity
- Low thermal conductivity
- Low VOC
- Low installation cost
- Fast cure

### INSULATING MECHANISM

When energy is introduced to a substrate surface through an increase in temperature, molecules get excited and travel through the material at different rates. This is why some materials are better insulators of heat versus conductors.

This understanding forms the thermal dynamic principle of the InsulCorr coating system. InsulCorr's proprietary additive technology lowers the thermal conductivity on contact with the substrate it's protecting.

A second physical property that compliments the InsulCorr's low conductivity property is its ability to reflect heat away from the surface. The low emittance value of the coating means that it absorbs less heat through radiation at specific wavelengths. Ultimately, the surface feels cooler to touch versus a black body surface with an emissivity closer to 1, a perfect absorber of heat.

### Physical Property

### Result

Color	RAL 7040 Gray
Gloss	Flat
No. of Components	1
Priming	Self priming
Max Temperature Rating	400 °F
Viscosity (Stormer)	150 KU
Emissivity Value (ASTM E408)	0.18
Carrier Solvent	Water
Solids Content	> 80 % by volume
Flame Spread (ASTM E84)	25
Smoke Developed (ASTM E84)	45
Accelerated Aging (200 hrs)	No change
Salt Fog (ASTM B-117)	> 1,500 hours
Elongation (ASTM D-638)	> 25 %
Thermal Conductivity	0.00097 W/cm*K
Coverage Rate	60 ft <sup>2</sup> /gallon @ 15 mils

## MIXING INSTRUCTION

InsulCorr is a single-component system. THIS PRODUCT CONTAINS HEAVY LOADING OF CERAMIC ADDITIVES. Mix with care as not to over shear or damage the insulative additives. Use only mud style paddle mixer with a low speed mechanical drill. Mix until the material is of a uniform consistency.

DO NOT HAND MIX.

DO NOT THIN PRODUCT.

Begin application immediately – no induction time required.

## SURFACE PREPARATION

- 1) Ensure that surface is clean, dry and uncontaminated in accordance with SSPC SP 1
- 2) Proceed only if the substrate temperature is more than 5°F above the dew point temperature during surface preparation and coating application.
- 3) Steel substrates - Minimum surface preparation shall be in accordance with SSPC SP 3. A higher degree of surface preparation may be required based on the end use. Consult with manufacturer
- 4) For applications above 250 °F, primer is required.
- 5) For high corrosion protection use a corrosion resistant primer is recommended.

## APPLICATION INSTRUCTIONS

Minimum Pump Ratio	33:1 airless
Spray Tip Size	0.19—0.27 “
Minimum hose size	3/8” for up to 50’ 1/2” for over 50’ Whip 1/4” max length 3’

Remove all screens and filters on spray machine and spray gun. Prime the pump with clean water 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.

To improve hang of the coating apply an initial coat of no more than 10 mils. 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.

## CLEAN UP AND STORAGE

Clean up with clean water.

Store between 60 °F and 90 °F , DO NOT FREEZE

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.

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