SPI COATINGS
PROVEN PERFORMANCE • REAL WORLD SOLUTIONS

INSULATION AND CORROSION SPECIALISTS

# HPC® Intermediate (HPCI)

## Technical Data Sheet (9/18/23)

### DESCRIPTION

HPC Intermediate (HPCI) Coating is designed to control heat transfer on surface temperatures between 400°F (200°C) up to 1000°F (538°C). It is water-borne and extremely lightweight in appearance. HPC® Coating uses a special acrylic/silicone resin blend with specific ceramic compounds added to provide a non-conductive block against heat transfer.

HPCI offers a "Green", non-flammable, non-toxic formula for high heat surface applications over standard to super steam pipe or oven wall construction. HPCI Coating is easily applied using a texture sprayer, and can be applied over metal, concrete, wood, and other substrates.

If HPCI can be applied over flat steel surfaces and adhere.

### TYPICAL USES

- As an insulation system over hot pipes, tanks, and valves
- To block heat loss from surfaces of over ambient or operation temperatures on lines and valves
- As a system to block conductive and convective heat
- Easily applied when a hot system cannot be shut down
- Can be applied over steel, concrete and other building material
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### APPLICATION METHOD

HPCI can be used for applications between 400°F/204°C to 1000°F/538°C. It must be applied according to Manufacturer's Application Instructions. NOTE: Applications applied over 450°F (232°C) may see the resins turn darker in color next to the hot surface, but the HPCI will continue to work as designed.

HPCI can be applied to metal and any hot surface.

The application is applied using a texture sprayer. For specific instructions on surface preparation, mixing and application, please refer to the SPI Application Instruction sheet for HPCI.

If HPCI is applied on surfaces outdoors, there is no need for a top coat unless a color is needed.

HPCI must be completely dry before applying topcoat.

HPCI If needed, Multi-Mesh Membrane System is used on hot pipes when continuous cycles cause out-of-norm vibration or movement, and where continuous impact caused by workers handling the hot pipe is unavoidable. Apply Multi-Mesh Membrane between layers of HPCI.

NOTE: For surfaces 1000°F/538°C with air flow, 40mm/1600 mils is approximately 210°F/99°C; on surface cycles of 1000°F/538°C down to ambient and back up to 1000°F/538°C, this does not affect adhesion.

NOTE: If an asset is specified and then a change of assets is made, the new asset to be painted must have a comprehensive engineering review to consider safety concerns before the application is allowed.

### TESTS AND CERTIFICATIONS

1. ISO8302/ASTM C 177 (similar to HPC) – Thermal Conductivity (0.063 W / mK @ 86°F/30°C))
2. USDA Approved

### MINIMUM SPREAD RATES (mil thickness)

22.4 sq. ft./gal = 50 mils dry film thickness
11.2 sq. ft./gal = 100 mils dry film thickness
5.61 sq. ft./gal = 200 mils dry film thickness
4.5 sq. ft./gal = 250 mils dry film thickness

### PHYSICAL DATA

- Solids: By Weight: 49.0% / By Volume: 80.00%
- Dry Time: If between 400-1000°F.; 5-10 minutes per coat, or until steaming action has finished.
- Lead and chromate free
- Water-borne
- Cures by evaporation
- Weight: 6.1 lbs. per gallon
- Vehicle Type: Acrylic/silicone Blend
- Shelf Life: Up to 1 year if unopened under appropriate storage conditions (See MSDS)
- VOC Level: 25.1 grams/liter, 0.209 lbs./gal.
- pH: 8.5
- Maximum Surface Temperature when applying: 1000°F (538°C)
- Minimum Surface Temperature when applying: 400°F (204°C)
- Maximum Surface Temperature after curing: 1000°F (538C)*

***NOTE***: Apply only over dry surfaces (inside or out) and when sun is shining (for external application). Do not apply in the rain or if there are or have been heavy cloud conditions or high humidity for a prolonged series of days. Conditions MUST be dry and sunny or partly cloudy with enough sun to dry coating film before nightfall.

### IMPORTANT

Do not take internally. Avoid contact with eyes. If solution comes in contact with eyes, flush immediately with water and contact a physician for medical advice. Avoid prolonged contact with skin or breathing of spray mist. **KEEP OUT OF REACH OF CHILDREN.**