



# HPC<sup>®</sup>

## Technical Data Sheet (5/5/15)

### DESCRIPTION

HPC<sup>®</sup> Coating is designed to control heat transfer on surface temperatures up to 900°F (482°C). It is water-borne and extremely lightweight in appearance. HPC<sup>®</sup> Coating uses a special acrylic resin blend with specific ceramic compounds added to provide a non-conductive block against heat transfer.

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

If HPC<sup>®</sup> Coating is to be applied over flat steel surfaces, see manufacturer for instructions.

### TYPICAL USES

- As an insulation system over hot pipes, tanks, and valves
- To block heat migration into cold tanks, lines, and valves
- As a system to block conductive and convective heat
- Easily applied when a hot system cannot be shut down

### APPLICATION METHOD

HPC<sup>®</sup> Coating should only be used for applications less than 700°F (371°C) degrees; if over 700F, apply according to manufacturer's instructions.

HPC<sup>®</sup> Coating can be used for applications over 700°F (371°C) up to 900°F (482°C) but only according to the manufacturer's instructions.

HPC<sup>®</sup> Coating can be applied to metal, concrete, masonry and wood.

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 HPC<sup>®</sup> Coating.

If HPC<sup>®</sup> Coating is applied on surfaces outdoors, you **must** overcoat the HPC with Super Therm<sup>®</sup>, Rust Grip<sup>®</sup>, SP Liquid Membrane or Enamo Grip according to what is needed. It cannot be left uncoated and left exposed to weather conditions. It is light-weight to insulate, which leaves it vulnerable to weather conditions.

HPC<sup>®</sup> Coating must be completely dry before applying top coat.

HPC<sup>®</sup> Multi-Mesh Membrane System is used on hot pipes when continuous cycles cause movement, and where continuous impact caused by workers handling the hot pipe is unavoidable. Apply Multi-Mesh Membrane between layers of RUST GRIP or MOIST METAL GRIP for exterior toughness. Multi-Mesh Membrane combined with RUST GRIP or MOIST METAL GRIP forms a hard cast for exterior strength and moisture barrier to protect the HPC system. A final top-coat of SP LIQUID MEMBRANE should be added for impact resistance and movement from elongation during heat cycles to avoid stress cracks.

### TESTS AND CERTIFICATIONS

1. ISO8302/ASTM C 177 – Thermal Conductivity (0.063 W/mK @ 86°F/30°C)
2. ASTM E 84 – Class A
3. ISO 8302 – Thermal Conductivity
4. IMO – MSC.61(67) Smoke and Toxicity Test
5. Marine Approvals – American Bureau of Shipping;
6. USDA Approved

### MINIMUM SPREAD RATES (mil thickness)

- 23.0 sq. ft./gal = 50 mils dry film thickness
- 11.5 sq. ft./gal = 100 mils dry film thickness
- 5.75 sq. ft./gal = 200 mils dry film thickness
- 4.7 sq. ft./gal = 250 mils dry film thickness

### PHYSICAL DATA

- Solids: By Weight: 47.0% / By Volume: 71.00%
- Dry Time: If between 200-300°F.; 10-30 minutes per coat, or until steaming action has finished.
- Lead and chromate free
- Water-borne
- Cures by evaporation
- Weight: 5.0 lbs. per gallon
- Vehicle Type: Urethane / Acrylic Blend
- Shelf Life: Up to 1 year if unopened under appropriate storage conditions (See MSDS)
- VOC Level: 25.1 grams/liter, 0.209 gal./lbs.
- pH: 8.5-9.0
- USDA Approved
- Maximum Surface Temperature when applying: 900°F (482°C)
- Minimum Surface Temperature when applying: 40°F (5°C)\*\*
- Maximum Surface Temperature after curing: 900°F (482°C)
- HPC Coating will not totally burn. Any initial flame will burn off the surface resin before charring and blocking the flame.

**\*\*If operating temperature is NOT over 200°C, HPC can be applied at minimum 40°F. If operating temperature is over 200°C, then minimum application temperature is 200°C.**

### IMPORTANT

Do not take internally. Avoid contact with eyes. If solution does come 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.**

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