



HPC[®]

Technical Data Sheet (5/26/17)

DESCRIPTION

HPC[®] Coating is designed to control heat transfer on surface temperatures up to 572°F (300°C). It is water-borne and extremely lightweight in appearance. HPC[®] Coating uses a special acrylic resin blend with specific ceramic compounds added to provide a non-conductive block against heat transfer.

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

If HPC[®] 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[®] Coating can be used for applications 'up to' 572°F (300°C). It must be applied according to Manufacturer's Application Instructions.

NOTE: Applications applied over 482°F (250°C) may see the resins turn tan to brown in color next to the hot surface, but the HPC will continue to work as long as the ceramics are still in place.

HPC[®] 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[®] Coating.

If HPC[®] Coating is applied on surfaces outdoors, you **must** overcoat the HPC with Super Therm[®], Rust Grip[®], 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[®] Coating must be completely dry before applying top coat.

HPC[®] 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, ENAMO 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.

NOTE: For surfaces over 450°F (232°C) see Technical Sheet for HPC-HT.

TESTS AND CERTIFICATIONS

1. ISO8302/ASTM C 177 – Thermal Conductivity (0.063 W/mK @ 86°F/30°C)
2. ISO 8302 – Thermal Conductivity
3. IMO – MSC.61(67) Smoke and Toxicity Test
4. Marine Approvals – American Bureau of Shipping;
5. USDA Approved
6. Russian field test – w/mK 0.035 avg.

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: 69.00%
- ◆ Dry Time: If between 200-300°F.; 10-30 minutes per coat, or until steaming action has finished.
- ◆ Water-borne
- ◆ Cures by evaporation
- ◆ Weight: 5.2 lbs. per gallon
- ◆ Vehicle Type: Acrylic Blend/Co-solvents
- ◆ 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: 8.5-9.5
- ◆ USDA Approved
- ◆ Maximum Surface Temperature when applying: 572°F (300°C)
- ◆ Minimum Surface Temperature when applying: 40°F (5°C)
- ◆ Maximum Surface Temperature after curing: 572°F (300°C)*
- ◆ HPC Coating will not totally burn. Any initial flame will burn off the surface resin before charring and blocking the flame.

* Operating temperatures have been higher in the field. See manufacturer for instructions.

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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