HPC® HT COATING

Technical Data Sheet (10/10/17)

DESCRIPTION
HPC®-HT is a three-part (A+B+C) hybrid acrylic/silicone resin, water-based coating using specific ceramic compound loads for application directly over surfaces 200°C (392°F) and up to 600°C (1112°F). It was designed to block and hold the interior temperature on the surface and reduce heat transfer loss to ambient.

HPC®-HT Coating offers a 'green', nonflammable, non-toxic formula for high-heat surface applications. HPC®-HT is easily applied, and can be applied direct to metal, concrete and other high-temperature surfaces.

TYPICAL USES
- As the high-temp insulation coat for surfaces greater than 200°C, over hot pipes, tanks, and valves
- To hold heat on the surface of the pipe, valve, etc.
- As a system to block conductive and convective heat transfer
- Applied when a hot system cannot be shut down.

NOTE: A respirator should be worn while mixing and applying the HPC®-HT Coating.

APPLICATION METHOD
HPC®-HT Coating is a three-component product. As thickness is applied and finished with standard HPC® or top coat.

HPC®-HT SYSTEM can be used for applications over 392°F (200°C) up to 1112°F (600°C) but only according to the manufacturer's instructions.

The application is applied using a texture sprayer. For specific instructions on surface preparation, mixing and application, please refer to the HPC®-HT Coating Application Instruction Sheet.

If HPC®-HT is applied over hot exterior surfaces, and needs to be over-coated, SUPER THERM®, RUST GRIP®, or ENAMO GRIP can be used according to what is needed.

NOTE: If there is thermal movement on pipes or unit, then a flexible topcoat has to be used (see manufacturer).

HPC®-HT must be completely dry before applying top coat.

HPC® Multi-Mesh Membrane System or high-temp mesh can be 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 or underground uses for buried pipe. 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®-HT system. A final topcoat of SUPER THERM or SP SEAL COAT should be added for impact resistance and movement from elongation during heat cycles to avoid stress cracks.

NOTES:
1. Overspray with a hopper gun can be 15-20% loss and must be factored in. Using a TexSpray 2000, overspray will be less, 10-15%.
2. Example: 450°C pipe surface needs up to 50mm of HT before finishing with regular HPC®. Submit details to SPI for calculations of thickness and reduced heat loss.
3. HPC®-HT calculated thickness must be applied in multi-coats and all applied until thickness is achieved. Start and finish a selected area is best practice.
4. Part A is a ceramic powder and must be mixed into Part B and C inside a closed room—no wind.

MINIMUM SPREAD RATES (mil thickness)
2.5 sq.ft./gal. = 500 mils dry (0.24 sq.mtr. = 12.5mm)
1.3 sq.ft./gal. = 1000 mils dry (0.12 q.mtr. = 25mm)

PHYSICAL DATA
- Solids: By Weight: 73.0% / By Volume: 82.6%
- Dry Time: If between 400-650°F., 20 minutes per coat, or until steaming action has finished.
- Lead and chromate free
- Water-borne
- Cures by evaporation on hot surfaces
- Weight: 6.97 lbs. per gallon (3.1 kilos)
- Vehicle Type: Acrylic hybrid blend
- Shelf Life: Up to 2 years if unopened under appropriate storage conditions (See SDS)
- VOC Level: 200 grams/liter, 1.67 lbs./gal.
- pH: 9.0-11.0
- Maximum Surface Temperature when applying: 1112°F (600°C)
- Minimum Surface Temperature when applying: 390°F (200°C); less than 200°C, use regular HPC®
- Maximum Surface Temperature “after curing”: 1112°F (600°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.

LIMITATION OF LIABILITY: The information contained in this data sheet is based upon tests that we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the products made by SPI, whether in technical documentation, or in response to a specific query or otherwise, are based on data with which we are not fully knowledgeable or reliable. The products and information are designed for users having the requisite knowledge and industrial skills, and the end-user has the responsibility to determine the suitability of the product for its intended use.

The information contained in this data sheet is subject to modification as a result of practical experience and continuous product development. This data sheet replaces and annuls all previous issues and the user has the responsibility to ensure that this sheet is current prior to using the product.