

SPI COATINGS

PROVEN PERFORMANCE • REAL WORLD SOLUTIONS

INSULATION
AND
CORROSION
SPECIALISTS

HPC® HT Primer

Application Instructions (01/29/20)

HPC®-HT Primer is a single-component hybrid resin, waterbased coating mixed on job site before application. It is a hightemperature primer designed to provide an initial adhesion layer for better HPC HT adhesion that is highly loaded with ceramic fibers.

It is dense and lightly textured in appearance after mixing. HPC®-HT Primer is a hybrid system with specific ceramic fiber compounds to provide an adhesion layer. HPC®-HT Primer offers a non-flammable/non-toxic formula for hot surface applications over standard steam pipe or oven wall construction, and heat exchangers. The coating was designed to create a monolithic primer system that can be sprayed over extreme temperature surfaces. It can be applied over metal, and most other hot substrates. It can cover all configurations. Can be applied at ambient but requires a day to dry.

SURFACE PREPARATION

Surface must be clean from oil, tar, rust, grease, salts, and films.

- Clean <u>ambient surfaces</u> using TSP (tri-sodiumphosphate) or a citrus cleaner to release dirt and degreaser residue and pressure-wash, if possible, @ 3500 psi. and allow to dry.
- Salt contamination on a surface can come as a result of saltwater, fertilizers, and car exhaust. If surface is over 300°C, no need to treat. Acceptable levels: Nitrates: 5-10 mcg/cm², Sulfates: 5-10 mcg/cm², Chlorides: 3-5 mcg/cm²
- Clean <u>hot surfaces</u> by removing pack rust, loose dirt and rust using a metal brush or mechanical tool. Remove mil-scale by grit blast, power tool or hammer gun. (Never use needle guns)
- NOTE: The temperature of a pipe, valve, or tank cannot be determined using an IR-gun by taking the exterior surface temperature where heat is released into the atmosphere. Surface temperatures will rise to match the temperature of the fluid or gas contained once the surface is coated and the heat is held back.

MIXING

NOTE: While mixing and applying HPC®-HT PRIMER, you should wear a paint respirator at all times.

- Mix with SPI's 6" diameter dispersion blade at a low to medium speed until you achieve a smooth texture.
- **NOTE**: For start & stop (lunch), clean equipment with soap and water anytime a stop time of 1 hour or more will take place.

APPLICATION

HPC®-HT Primer must be applied by spray.

- Place a drop cloth under the pipe or unit being sprayed to catch any drips.
- Use a hopper gun for all applications (use smallest tip).
- The application is applied using a hopper gun. HPC®-HT PRIMER will dry immediately upon contact and be ready for the regular HPC-HT application.

NOTES:

- According to tip size, overspray with a hopper gun can be 15-20% loss, and must be factored in.
- HPC®-HT PRIMER is applied to 30 mils (0.75mm) thickness.
- Open and stir; will have a textured look.
- 4) For operating temperature below 200°C (400°F), use standard HPC® Coating without Primer to achieve insulation.
- 5) Regular HPC HT can be applied over the Primer as soon as possible. Allow Primer to completely steam off between coats before applying additional product.
- If not spraying for more than 30 minutes, do a hand-stir to achieve consistency.
- NOTE: The steam release from the water-blended resins has a slight odor and is initially irritating to the eyes. Set up a fan or exhaust to draw any fumes or steam out of the area.
- NOTE: Spray in blasts while quickly moving down the surface. The HT Primer is only 38.7% solids and you cannot hold in one place too long.

MINIMUM SPREAD RATES (mil thickness)

- 22 sq.ft./gal. = 30 mils dry (2.0 sq.mtr. = 0.75mm).

 Apply ini two coats with each coat @ 40 mils (1mm) wet. Wait 5 minutes between 1st and 2nd coat.
- SAFETY NOTE: (PPE) Respirator with carbon filter must be used when spraying by anyone in the area.

CLEAN-UP EQUIPMENT

During breaks, spray systems should be flushed with soap and water, and waste product disposed of properly.

Storage of Product: Store HPC®-HT Primer between 40°F (5°C) and 120°F (49°C).