SUPERTHERM® TECHNICAL DATA SHEET

THERMO-DYNAMIC TUNING (04/014/06)

DESCRIPTION:

SUPER THERM is a unique one-part combination of high-performance aliphatic urethanes, elastomeric acrylics, and resin additives in a water-borne formula. SUPER THERM has four different ceramics that block 96% of the three sources of heat - visual light, ultra violet rays and infrared rays. SUPER THERM is a permanently flexible "breathing" membrane that stops water penetration, and prevents corrosion and surface deterioration.

TYPICAL USES:

* As a one-coat insulation system on exterior and interior substrates (roofs, walls, and floors)
* As an insulator for transportation vehicles, refrigerated containers, and railroad cars
* As insulation and to stop condensation on HVAC systems, tanks, and storage systems
* As a one-coat "flexible and breathable" protective system over metal, concrete, masonry, and wood to stop water penetration and corrosion, repel dirt, mold, mildew, and pollution, increase longevity, and reduce surface maintenance

APPLICATION METHODS:

SUPER THERM can be applied to metal, concrete, masonry, and wood. The application can be by spray, brush, or roller. For specific instructions on surface preparation, mixing, and application, please refer to the SPI's application instructions for SUPER THERM.

PHYSICAL DATA:

* Solids: By weight 63.6% / by volume 68%.
* Film Thickness: On all substrates SUPER THERM should be applied at 16 mils wet / 10 mils dry. Under no circumstances should SUPER THERM be applied at less than 16 mils wet.
* Dry Time: One hour to touch at 70F. degrees and bright sun / Overcoat window is twohours or longer at 70F. degrees / Fully cures in twenty one days.
* Lead and chromate free.
* Cures by evaporation with no co-solvents present.
* Weight: 11.88 lbs. per gallon.
* Shelf Life: Two years+.
* VOC Level: 21 grams/liter.
* pH: 8.5 - 9.0.
* Viscosity: 105-110 KU.

TESTS AND CERTIFICATIONS:

1) USDA approved
2) Marine approvals for salt water/maritime use:
   *DNV (Det Norske Veritas) *US Coast Guard
   *ABS (American Bureau of Shipping)
   *IMO (International Maritime Organization)
3) Energy Star Rating - approved and accepted as an energy partner for energy savings
4) Factory Mutual approval
5) BOCA (Building Officials Code Adm.) approved
6) UL (Underwriters Laboratory) approved
7) California Cool Roof Program approved and listed
8) Flame Spread Test (ASTM E8489/UL 723): Flame = 0 / Smoke = 0 / Class A Flame Spread
9) Flexibility (ASTM E1737): 180F deg. bend-passed
10) Adhesion (ASTM B3359): rated a 5B
11) Perm Rating (ASTM E96): 8.8 avg
12) Tensile Properties (ASTM D412): 444 psi
13) Abrasion Resistance (ASTM D4060): 3,000 cycles
14) Resistance to Salt Spray: 2000 hrs
15) Resistance to Wind Driven Rain (ASTM E514)
16) Sound Reduction: STC-Rated 48-51
17) RE20: two coats interior (ASTM C236)
18) RE19: one coat exterior (ASTM C236)
19) Blocks 99.5% of infrared / 68% sound blockage
20) 70% of Japanese marketshare
21) Resists mold and mildew
22) NASA tested and listed
23) Blocks moisture in concrete blocks

SAFETY PRECAUTIONS:

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: proper ventilation, use of proper lamps, wearing of protective clothing and masks, tenting, and proper separation of application areas.

KEEP OUT OF REACH OF CHILDREN.

For more specific safety procedures, please refer to the SUPER THERM Material Safety Data Sheet.