DESCRIPTION
SUPER THERM® is a water-borne combination of high-performance aliphatic acrylics, urethanes and resin additives which produces a tough, yet flexible coating film. Designed for performance and durability, SUPER THERM® contains 4 unique ceramics to block heat gain into the surface upon which the coating film is applied. SUPER THERM® resists 95% of Solar heat blocking Visual Light, Ultra Violet (UV), and Infrared (IR). SUPER THERM® is a flexible membrane with low permeability that can greatly reduce expansion and contraction of a roof, and prevents corrosion and surface deterioration.

TYPICAL USES
- As a one-coat insulation system on exteriors to block the migration of Solar Heat gain (roofs and side walls).
- As an insulation system for interior applications to seal and block IR heat loss and ambient heat loss.
- For interior insulation uses see number three in testing.
- Exterior application to reduce or eliminate condensation on HVAC systems, tanks, spheres, storage systems, and concrete walls.
- As a system over metal, concrete, masonry, and wood to stop moisture penetration and corrosion.
- Ability to resist dirt, mold, mildew, and pollution to increase longevity, and reduce surface maintenance.
- As a topcoat over metal roofs, or an intermediate coat on flat roofs.
- Applied over tent fabrics to provide insulation & remain flexible.
- Applied to tilt-up concrete walls to hold interior heat.

APPLICATION METHODS
SUPER THERM® can be applied to metal, concrete, masonry and wood. The application can be spray, brush or roller. For specific instructions on surface preparation, mixing and application, please refer to the SPI’s application instructions for SUPER THERM®. This coating should never be applied at less than 17 mils wet (425 microns), 10.0 mils dry (250 microns), each coat.

TESTS AND CERTIFICATIONS (partial list)
1. Exterior insulation against Solar Radiation - benefit comparable to R 10
2. Blocks 99.5% of infrared / up to 68% sound blockage
3. Interior - ASTM C1383 (Guarded Hot Box), E1269 and E1461-92 (Blocking heat through coating film)
4. UL (Underwriters Laboratory) approved
5. Flame Spread Test (ASTM E84); 0 smoke, 0 flame
6. Class “A” Flame Spread
7. Marine Approvals: American Bureau of Shipping; USCG
8. UV & Salt Spray Resistance (ASTM 5894) 5000 hours
9. USDA Approved
10. Flexibility (ASTM E1737): 180 degree bend – passed
11. Adhesion ASTM D4541: 115.2psi, not suitable for films <5 mils
13. Abrasion Resistance (ASTM D4060): 3,000 cycles
14. Resistance to Salt Spray: 2,000 hours
15. Resistance to Wind Driven Rain (ASTM D6904)
16. Airforce Canopy: MIL-PRF-6799

PHYSICAL DATA
- Solids: By weight 70% / By volume: 80% (+/-2%)
- 30-60 minutes to tack free at 70°F (21°C)
- Overcoat: 2 hours when 70°F (21°C) at 40% Relative Humidity
- Full Cure: 21 days
- Lead-, chromate-, and asbestos-free
- Cures by evaporation
- Weight: 11.72 lbs per gallon
- Vehicle Type: Urethane/Acryllic blend
- Shelf Life: Up to 5 years if unopened under appropriate storage conditions (See MSDS).
- VOCL Level: 67.2 grams/liter, 0.561 gal/lbs.
- Viscosity: 105 – 110 KU; 25,000 Centipoise
- ph: 8.5 – 9.5
- 95 sq. ft./gallon (8sqm): 17 mils (425 microns) wet / 10.0 mils (250 microns) dry
- Maximum Surface Temperature when applying: 150°F (65°C)
- Minimum Surface Temperature when applying: 40°F (5°C)
- Maximum Surface Temperature after curing: 300°F (149°C)
- Do not apply over 18 mils wet per application. Allow to dry down before adding additional thickness.

MEETS MIL SPEC: MIL-PRF-6799L

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, and proper separation of application areas. For more specific safety procedures, please refer to the SUPER THERM® Material Safety Data Sheet. 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 enquiry, or otherwise, are based on data which to the best of our knowledge is 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.

SPI has no control over either the quality of condition of the substrate, or the many factors affecting the use and application of the product. Therefore, SPI does not accept any liability arising from loss, injury, or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

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.