**HEATSEAL**

**Product description**
HEATSEAL is a SINGLE PACK high performance heat insulation coating, with its excellent water repellant properties, HEATSEAL coating acts as an effective waterproofing system for concrete & metal structures.

**Product highlights**
- Excellent Heat Insulation Properties
- Excellent Waterproofing Properties
- Resistance to Corrosion
- Resistance to U. V. Radiations
- Excellent Resistance to Moisture
- Resistance to Abrasion
- Excellent Flexibility
- Excellent Resistance to chemicals
- Excellent Outdoor Stability
- Self-priming (No need of primer)

**Unique properties**
- SRI : 107
- Emissivity : 0.86
- Thermal Conductivity : 0.022 W/MK
- Thermal Stability : -40°C to 200°C

**Recommended use**
A specialty formulation specifically designed for use in various environmental situations to be used on exterior surfaces. It also gives a desired cosmetic finish. HEATSEAL offers excellent Aging & weathering resistance coupled with resistance to chemicals and is used to insulate the metal, concrete & plastic structures in the peak summer conditions and to prevent water leakages during rainy season.

**Film thickness and spreading rate**
Film thickness, dry (µm): 35-40 Microns per coat (Rec. 2 coats)
Theoretical spreading rate (m²/l): 5.5 -6 per coat
### Performance Properties

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Performance Test</th>
<th>ASTM STD.</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Scratch Hardness (4.7 KG)</td>
<td>D – 7027</td>
<td>No Exposure of Metal Substrate Passes the Test</td>
</tr>
<tr>
<td>02</td>
<td>Flexibility</td>
<td>D-1737</td>
<td>No film cracking or crazing</td>
</tr>
<tr>
<td>03</td>
<td>Pencil Hardness</td>
<td>D-3363-05</td>
<td>4H</td>
</tr>
<tr>
<td>04</td>
<td>Accelerated weathering</td>
<td>D-822</td>
<td>Passes with slight color change</td>
</tr>
<tr>
<td>05</td>
<td>Adhesion</td>
<td>D – 2197</td>
<td>No Peel-Off</td>
</tr>
<tr>
<td>06</td>
<td>Salt Spray Resistance</td>
<td>B - 117</td>
<td>No Surface Deterioration &amp; corrosion.</td>
</tr>
<tr>
<td></td>
<td>1000 HRS (At 80 Microns DFT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>Emissivity</td>
<td>C-1371</td>
<td>0.86%</td>
</tr>
<tr>
<td>08</td>
<td>Thermal Conductivity</td>
<td>C-518-10</td>
<td>0.22 W/mK</td>
</tr>
<tr>
<td>09</td>
<td>UV stability</td>
<td>D4587-05</td>
<td>Passes</td>
</tr>
<tr>
<td>10</td>
<td>SRI (Solar Reflective Index)</td>
<td>E-1980:01</td>
<td>107.14</td>
</tr>
<tr>
<td>11</td>
<td>Abrasion Resistance</td>
<td>D4060:2010</td>
<td>Passes 1000 Cycles</td>
</tr>
<tr>
<td>12</td>
<td>Chemical Resistance</td>
<td>D-543</td>
<td>Passes, No dusting</td>
</tr>
<tr>
<td></td>
<td>• 10% HCL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 10% H₂SO₄</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Aromatic Hydrocarbon -18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Pull off Strength</td>
<td>D-4541-09</td>
<td>4.4 MPa</td>
</tr>
<tr>
<td>14</td>
<td>Fire Spread Index* Smoke Developed Index*</td>
<td>ANSI/UL723</td>
<td>5 0</td>
</tr>
</tbody>
</table>

#### Surface preparation

All surfaces should be clean, dry and free from contamination.

#### Surface conditions

Temperature of the substrate - Minimum 3°C above the dew point of the air temperature
Relative humidity – Maximum 80 % measured in the vicinity of the substrate.
Application methods
Spray- Use Airless Spray or Air Assisted Spray
Brush- Care must be taken to achieve the specified dry film thickness.
Roller- Care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

Application data
Mixing ratio - Single Pack Ready to Use System. No Mixing of Two Components
Pot life - No Pot Life (Can be used for six months after opening the Container) Viscosity if needed can be adjusted with special solvent THINNER SK13

Guiding data airless spray
Pressure at nozzle- 15 MPa (150 kg/cm², 2100 psi)
Nozzle tip- 0.43-0.79 mm (0.017-0.031")
Spray angle- 40-80°
Filter Check to ensure that filters are clean.

Drying time
Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with: * Good ventilation (Outdoor exposure or free circulation of air) *

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>-10°C</th>
<th>0°C</th>
<th>10°C</th>
<th>23°C</th>
<th>40°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface dry (dry to handle)</td>
<td>30 min</td>
<td>25min</td>
<td>20 min</td>
<td>15 min</td>
<td>10 min</td>
</tr>
<tr>
<td>Hard dry</td>
<td>24 hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry to recoat, minimum</td>
<td>30 minutes minimum (for testing purpose- 24 hrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Typical coating system
For Heat Insulation on Metal & Concrete
HEATSEAL- 2 x 40 µm (Dry Film Thickness)

Storage
The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

Handling
Handle with care. Stir well before use.

Packaging size
20 liters Metal Containers
Health and safety
Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately. For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Material Safety Data Sheet.

Disclaimer
The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product can be used under conditions beyond our control, we can only guarantee the quality of the product itself. We also reserve the right to change the given data without notice. Minor product variations may be implemented in order to comply with local requirements.

ISSUED ON 14 NOVEMBER 2019 BY SK FORMULATIONS INDIA PVT. LTD.
THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED.