

## ISONEM THERMAL PAINT TECHNICAL DATA SHEET

<b>Product Name</b>	: ISONEM Thermal Paint
<b>Type</b>	: Waterborne thermal insulation paint containing special vacuumed microspheres that are elastomeric resin based
<b>Density (25°C, g/mL)</b>	: 0.85 ± 0.10
<b>pH (25°C)</b>	: 7.0 – 9.0
<b>Viscosity (25°C, mPa.s)</b>	: 12500 - 13500
<b>Solid Content (% Weight)</b>	: 53 ± 2
<b>Water Transmission Rate (kg/ m<sup>2</sup>. h<sup>0.5</sup>)</b>	: ≤ 0.1, CLASS W <sub>3</sub>
<b>Adhesion strength by pull-off test (N/mm<sup>2</sup>)</b>	: Crack-bridging system trafficking ≥ 1,5 With trafficking ≥ 2,5
<b>Permeability to Water Vapour (m)</b>	: 5 ≤ sD ≤ 50, CLASS II
<b>Brightness (85° angle)</b>	: ≤ 10, CLASS G <sub>3</sub>
<b>Covering Power (m<sup>2</sup>/L)</b>	: CLASS I
<b>Wet Abrasion Resistance (µm)</b>	: ≥ 5 and < 20, CLASS II
<b>Surface Heat Transmission Value (ε)</b>	: min. 0.80
<b>Thermal Paint Surface Resistance (R<sub>s</sub>)</b>	: 0.0495 ± % 1,5
<b>Heat Conductivity Coefficient (W/mK)</b>	: λ < 0,060
<b>Sunlight Absorbency Value (α)</b>	: min. 0.80
<b>Carbon Dioxide Permeability (g/m<sup>2</sup>.d)</b>	: CLASS C <sub>0</sub>
<b>Crack Covering Feature (µm)</b>	: CLASS A <sub>0</sub>
<b>Impact Resistance</b>	: No Cracking & Rupture
<b>Grain Size (µm)</b>	: CLASS S <sub>2</sub>
<b>Solvent</b>	: Water
<b>Flash Point (°C)</b>	: N/A (not applicable)
<b>Class of Fire Reaction</b>	: B S1 d0
<b>Certification</b>	: TSE K 127 THERMAL PAINTS
<b>Consumption</b>	: 1 lt/m <sup>2</sup> (at least 1mm & 1.5 mm thickness on exterior walls) min. 300 ml/m <sup>2</sup> in interior applications

<b>Color</b>	: Can be produced in any color
<b>Packaging</b>	: 10 and 18 kg PE Buckets
<b>Application Temperature (°C)</b>	: 5 – 60
<b>Storage Temperature (°C)</b>	: 5 – 35
<b>Storage Condition/Shelf life</b>	: 24 months from production date, if stored dry condition
<b>Application Tools</b>	: Brush, roller, suitable sprayer

## SURFACE PREPARATION

The surfaces to be applied with paint must be free from dirt, oil, rust, grease, loose parts and other foreign materials. Before application, ISONEM UNIVERSAL ASTAR insulation and paint primer should be applied in a single coat with 200 - 300 gr/m<sup>2</sup> consumption by diluting with 1/7 water (1 part UNIVERSAL ASTAR: 7 parts water). Then the primer is allowed to dry for 4 hours.

## APPLICATION METHOD

ISONEM THERMAL PAINT should be mixed thoroughly before use. For exterior applications, 3 full layers should be applied by a roller or brush without thinning the product. It should be applied as 1 coat and 2 coats according to color and covering feature in the interior applications. It is recommended to apply with an epoxy roll in the interior façade applications, where patterns are not desired. After the first coat dries, second and third coat applications should be done. Wait 2 hours between two coats.

## FEATURES AND BENEFITS

- Radiant heat proof,
- Provides energy savings up to 40%,
- Applicable to indoor and outdoor surfaces,
- Low labor costs, easy and short application,
- Prevents moisture and mold formation on the wall,
- Water and sound insulation,
- Dirt-repellent, easy to clean,
- Late flammability and non-flammability.