ISONEM® THERMAL PAINT

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Interior and Exterior Thermal Insulation Paint

ISONEM THERMAL PAINT is an elastomeric resin-based, contains special vacuum microspheres, water-based, have vapor-permeability, a low thermal conductivity, high solar radioation absorption and high surface heat transmitting values. Its activity is scientifically proved special insulating paint which provides the thermal and water insulation in the interior and exterior facades. It provides energy savings to buildings of up to 40% depending on the application layers number in heating and cooling energy costs. When the **ISONEM THERMAL PAINT** with special vacuum microspheres is used as interior wall paint, it reflects the radiant heat generated inside to the interior environment, and when it is used on the exterior, the incoming radiant heat is reflected back to the outside. It is a single component based on water-based, elastomeric resin.

TECHNICAL SPECIFICATIONS

- **Certification :** TSE K 127 THERMAL PAINTS
- **Class :** Cold climate paint
- **Covering Power (m²/L) :** CLASS I
- **Permeability to water vapour (m) :** 5≤ sD ≤ 50, CLASS II
- **Grain Size (µm) :** CLASS S2
- **Water Transmission Rate (kg/ m². $h^{0.5}$) :** ≤ 0.1, CLASS W3
- **Carbon Dioxide Permeability (g/m².d) :** Not required, CLASS C0
- **Surface Heat Transmission Value (ε) :** Min. 0.80
- **Thermal paint surface resistance (RS) :** 0.0495 ± 1.5%
- **Heat Conductivity Coefficient (W/mK) :** λ <0.060
- **Sunlight Absorbency Value (α) :** Min. 0.80
- **Wet Abrasion Resistance (µm) :** ≥ 5 and < 20, CLASS II
- **Brightness :** Not required
- **Crack Covering Feature (µm) :** Not required, CLASS A0
- **Impact Resistance :** No Cracking & Rupture
- **Density (25°C, g/mL) :** 0.85 ± 0.10
- **PH (25°C) :** 7.0 - 9.0
- **Viscosity (25°C, mPa.s) :** 12500 - 13500

CONSUMPTION : 1 L/m² for exterior applications (minimum 1 mm & 1.5 mm thickness)
Maximum 300 ml / m² for interior applications
PACKAGING : 10 L and 18 L, 5 L (white color only) PE buckets
10 L. : 7 - 10 m²/1 bucket. **18 L. :** 12 - 18 m²/1 bucket.
SHELF LIFE : 24 months in original, unopened package, **cool and dry environment.**
COLOR : Produced in white or in desired colors.

PROPERTIES

- Radiont heat proof.
- Saves up to 40% energy.
- Applicable to internal and external surfaces.
- Labor costs are low and easy to apply.
- It prevents the formation of moisture and mold in the wall.
- It has water and sound insulation feature.
- It has late flammability and nonflammability.

APPLICATION INFORMATION

Surface Preparation : Surfaces to be applied should be free of dirt, oil, paste, grease, loose parts and other foreign materials. Before application, **ISONEM UNIVERSAL PRIMER** insulation and paint primer should be applied with a ratio of 1/7 ratio of water **UNIVERSAL PRIMER** (1: 7 diluted with water,1 part primer, 7 part water) with 100 - 200 g/m² consumption. The liner is then allowed to dry for 4 hours.
Application Method : ISONEM THERMAL PAINT must be mixed thoroughly before use. In exterior applications, 2 to 3 coats can be applied by roller or brush without diluting the product. It should be applied as 1 or 2 coats according to color and hiding power. It can be applied by taking into consideration the drying processes. The second and third layer should be applied after the first layer has dried. Wait for 4 hours between two coats.

IMPORTANT

More or less consumption may cause non-productiveness, side effects.

The surface should be protected from rain, water, mechanical loads and impacts for 24 hours during and after the application.

General Features

- Helps to prevent mold and moisture formation
- Sound Insulation
- Thermal insulation
- %100 Water Isolation
- B S1 d0 Fire Class
- Hygienic, does not contain harmful substances
- Elastic
- Helps to prevent condensation
- Can be customized with color chart
- UV

Surface Floor	Concrete	Marble, Granite	Raw wood	Tile & Ceramic	Membrane, Shingle etc.	Steel & Metal
Application	Same direction as the first layer	X	Same direction as the first layer	X	Same direction as the first layer	Same direction as the first layer
Surface Humidity	Dry	X	Dry	X	Dry	Dry
Application Tools	Roller(synthetic epoxy), brush, spray	X	Roller(synthetic epoxy), brush, spray	X	Roller(synthetic epoxy), brush, spray	Roller(synthetic epoxy), brush, spray
Primer Usage	ISONEM UNIVERSAL PRIMER (1: 7 diluted with water,1 part primer, 7 part water)	X	ISONEM UNIVERSAL PRIMER (1: 7 diluted with water,1 part primer, 7 part water)	X	ISONEM UNIVERSAL PRIMER (1: 7 diluted with water,1 part primer, 7 part water)	Epoxy Shop Primer/ Antipas
Primer.Conspt	100 - 200 gr / m²	X	100 - 200 gr / m²	X	100 - 200 gr / m²	Consult the manufacturer
Product Usage	1 - 2 Layers (int.) 2 - 3 Layers (ext.)	X	1 - 2 Layers (int.) 2 - 3 Layers (ext.)	X	1 - 2 Layers (int.) 2 - 3 Layers (ext.)	1 - 2 Layers (int.) 2 - 3 Layers (ext.)
Product.Conspt	1 L / m² (int.) 300 mL / m² (ext.)	X	1 L / m² (int.) 300 mL / m² (ext.)	X	1 L / m² (int.) 300 mL / m² (ext.)	1 L / m² (int.) 300 mL / m² (ext.)
Betw.Two.Coats	4 Hours	X	4 Hours	X	4 Hours	4 Hours
Application	24 Hours	X	24 Hours	X	24 Hours	24 Hours

Application Conditions and Risks

Things to consider during and after the application	The application surfaces must be clean and free from dirt, oil, rust etc..
Applicable temperature	Between +5 and +35°C
ISONEM products for surface preparation	ISONEM Universal Primer should be used as a primer.
To prevent sweating	The surface which Thermal Paint is applied should be breathable. If Thermal Paint will be applied to the painted surface and the paint must have this feature.The information on consumption and through-dry time depend on manufacturer instructions for Epoxy Shop Primer or Anti Rust Primer.