

SurfaPaint™ ThermoDry Elastomeric Roof Hybrid

Thermal Insulation Sealant Hybrid (polyurethane-acrylic) Elastomeric formulation for roofs, horizontal and sloping exterior surfaces.

Product Description

SurfaPaint™ ThermoDry **Elastomeric Roof Hybrid** is a high-quality, thermal protective, hybrid polyurethane-acrylic elastomeric, water-based paint. The hybrid formulation is responsible for the elastomeric behaviour in a wide range of external temperatures. With the application of SurfaPaint™ ThermoDry **Elastomeric Roof Hybrid** it provides an impermeable, waterproofing coating, even in ponding water while being water vapor permeable, allowing the surfaces to breathe. It is also effectively covering microcracks of the substrate. Based on SurfaPaint™ ThermoDry nanotechnology, it ensures a significant reduction in thermal conductivity, reflects thermal radiation and limits moisture absorption. The properties of SurfaPaint™ ThermoDry **Elastomeric Roof Hybrid** enhance the energy efficiency of buildings, contribute to the reduction of cooling-heating costs, while improving the reduction of the CO₂ footprint. The product is environmentally friendly, contributing to the reduction of urban heat island.

Recommended Use

Ideal for the water insulation of exterior horizontal and inclining surfaces such as terraces, balconies and minor cracks. It can be applied to concrete, cement, plaster, roof tiles, bricks, mosaic cement mortar, bituminous membranes (with mosaic, without aluminium coating) and it is suitable for sealing terraces with photovoltaics

Key Benefits

- ☆ Waterproofs, blocks heat transfer and converses energy
- ☆ Reflects more than 90% of IR radiation
- ☆ Excellent gap bridging
- ☆ Withstands ponding water
- ☆ Excellent opacity and coverage
- ☆ Exceptional elasticity and substrate adhesion
- ☆ Excellent durability to UV & alkali resistance
- ☆ Odorless, environmentally friendly and low VOC
- ☆ Extended lifetime
- ☆ It can also be used as a primer (diluted) on concrete surfaces

NanoPhos S.A.

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Technical Specifications

Type ▶	Hybrid, polyurethane-acrylic elastomer
Color ▶	White
Density (EN ISO 2811-1) ▶	1.00 ± 0.05 g/cm ³
Cleaning solvent ▶	water
pH (ISO 19396-1) ▶	8.50 ± 0.05 g/cm ³
VOC (Volatile Organic Compounds) ▶	12 gr/L ¹
Viscosity (ASTM D562-10) ▶	102 KU
Dilution ▶	5-10% by volume with water
Solids (% v/v) ▶	56±5 %
Touch-dry time ▶	2-3h @20°C (*)
Drying time ▶	8-10h @20°C (*)
Min. Recoat Interval ▶	24h @20°C (*)
Thermal conductivity (EN ISO 12667: 2004) ▶	0.1 W/(mK)
IR Emittance Factor (ASTM E408-71) ▶	0.92
Reflectance (ASTM E 903-96) ▶	<ul style="list-style-type: none">▪ TSR: 91.58% (250-2200 nm)▪ VIS: 94.79% (380-780 nm)▪ NIR: 94.76% (700-2200 nm)▪ SRI = 106
Elongation ▶	<ul style="list-style-type: none">▪ 60°C: 400%▪ 23°C: 381%▪ -10°C: 315%
liquid water permeability (EN ISO 1062-3:2008) ▶	Class III (w-value = 0.040 kg / m ² h ^{0.5})

(*) Dry to recoat time is prolonged under low temperature and high humidity

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Certified from European Cool Roofs Council (ECRC)

Product ID: FA0000000 8



ECRC EUROPEAN COOLROOFS COUNCIL		Rated Product ID Number FA00000008	
RATED PRODUCT		Initial	Aged
Solar Reflectance		0.84	-
Infrared Emittance		0.89	-
Solar Reflectance Index		106	-
Climate type	Date of measurement	Manufacturers name	
-	-	11/12/2015 NanoPhos SA	

European Cool Roofs Council Ratings are determined for a fixed set of conditions which may not be appropriate for determining differing seasonal performance. The actual effect of solar reflectance and thermal emittance on building performance may vary with differing conditions. The manufacturer of this product stipulates that these ratings were determined in accordance with the applicable European Cool Roofs Council procedures.

Surface Application

All surfaces must be clean, dry and free of dust, oils, grease and loose residue. New cement substrates and new masonry should have matured for more than 4 weeks before applying the primer. Fill cracks and joints either with suitable repair material, or by applying a polyester fabric (gauze) impregnated with SurfaPaint™ ThermoDry Elastomeric Roof Hybrid.

Before applying SurfaPaint™ ThermoDry Elastomeric Roof Hybrid, the surface is primed using SurfaPaint™ ThermoDry Elastomeric Roof Hybrid itself thinned up to 50% by volume with water or water-based primer SurfaMix™ P (for porous surfaces) and SurfaMix™ Epoxy Primer WB (for non-porous surfaces, e.g. metal surfaces, ceramic tiles, cementitious surfaces or old polyurethane coatings).

Application Instructions

Stir well before use. Application temperature should be between 8°C - 35°C. Surface humidity should not exceed 6% and atmospheric humidity should not exceed 80%. Apply 2 coats, undiluted, using a good quality brush, roller or spray gun. Make sure corners and edges are adequately covered.

Recoating time should be 24 hours and crosswise. Maximum sealing capacity is achieved 7 days after application. Good ventilation is required to ensure proper drying. Tools and equipment should be cleaned with water immediately after use.

Spreading Rate

2±0.5 m²/L, depending on the absorbance of surface application (primer and two coats)

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Additional Information

With a suitable primer, it can be applied to other types of surfaces. Using SurfaShield™ C maintains reflectivity for even longer

Storage

Store in the original closed package, in a well-ventilated area, at a temperature of 5°C to 35°C, away from sunlight and frost. Inclement storage conditions may affect product quality.

Health & Safety

Read the label of the product before use. Safety Data Sheet is available through NanoPhos' website www.NanoPhos.com or upon request by contacting NanoPhos through email: info@NanoPhos.com or by telephone: (+30) 2292069312.

Available Packaging

- 3L Plastic bucket
- 10L Plastic bucket

Disclaimer: The Technical Data Sheet recommendations for the use of NanoPhos' products are based on our scientific knowledge, laboratory studies and long-term experience. The information provided must be considered indicative and subject to constant review based on specific conditions and each practical application. The suitability of the product should be examined in each case for specific use and the end user bears full & exclusive responsibility for any side effects that may arise from the incorrect use of the product. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. For more information please contact NanoPhos: info@NanoPhos.com

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