

SurfaDur R ThermoDry

Solventless (100% Solids), Polyaspartic Energy Efficient Roof Coating

Description

SurfaDur R ThermoDry is a high performance, two component, polyaspartic flexible waterproofing and energy efficient coating system, high-built and UV resistant. It is based on ThermoDry Technology which combines reduced thermal conductivity with heat reflectance properties for liquid membrane applications. It prevents overheating and energy losses by the innovative action of its ingredients, significantly reducing the problems caused to the building by thermal changes. Its thermal insulating and waterproofing properties ensure the protection of surfaces from cracks and thermal changes. Its aliphatic character and the special UV blockers contained, assure durability under the harshest weathering conditions and superb whiteness over time. Among others, SurfaDur R ThermoDry's advantage is its fast curing and easy to use, which results in delivering building projects faster without problems or unnecessary expenses.

Recommended Use

SurfaDur R ThermoDry is suitable for waterproofing exposed concrete roofs, cement slabs, mosaics or cement screed, metal roofs, TPO systems, EPDM, or bituminous membranes but also well adhered acrylic and polyurethane based waterproofing coatings.

Key Benefits

- ☆ Energy saving coating
- ☆ Reduction of CO₂ emissions
- ☆ Enhanced building's life span
- ☆ Excellent UV light resistance, non-yellowing
- ☆ Fast reactivity and fast return-to-service time
- ☆ 100% solids, odourless
- ☆ Excellent tensile strength and flexibility
- ☆ High hydrolysis resistance
- ☆ Excellent temperature stability
- ☆ Excellent solar reflectance
- ☆ Seamless and jointless coating with high water resistance
- ☆ Excellent adhesion on concrete, mineral or asphalt substrates with appropriate surface preparation
- ☆ Temperature and humidity insensitive
- ☆ Variable application thickness is possible

Technical Specifications

Type:	Two-component Polyaspartic coating	Components:	Base A: Polyaspartic Ester Hardener B: Aliphatic Isocyanates
Colour:	White	Thinner/Cleaner:	< 10% NPTA NanoPhos Thinner A
Mixing Ratio (volumetric):	1.95 Base A: 1 Hardener B	Solids (% volumetric):	100%
Combo Density:	1.13 ±0,05 kg/L	Volatile organic compounds (VOC) Content:	< 1 g/L
Working Time (Max. Work Pot Life):	45 min @ 25°C *	Minimum Recoating Time:	8h min @ 25°C
Dry Through Time:	14h @ 25°C	Elongation at break:	428% @ 25°C
Full Curing Time:	48h @ 25°C	IR Reflectance (250-2200 nm):	89.98%
Hardness (Shore A):	>70	TSR (700-2200 nm):	93.97%
Temperature Range:	-20 °C to 60 °C	SRI Index:	114
Consumption Rate:	0.8 - 1.5 L/ m ²	Emissivity ε (ASTM C1371):	0.88
Spreading Rate:	0.67 – 1.25 m ² /L		

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(*) Increases in temperature and/or humidity will shorten working time, drying time and recoating time.

Surface Preparation

All surfaces should be clean, dry, and free from dust, oil, grease, loose materials and free from any contamination. Substrate temperature should not exceed 30°C and substrate humidity content should not exceed 15%, or else curing time values may decrease.

Use SurfaPaint Epoxy WB on any type of substrate, as the surface primer, for best adhesion. SurfaPaint Epoxy WB can be applied by roller, brush, or spray in one coat at a spreading rate of 10 m²/L. Along the edges of a roof with vertical elements (parapet, etc.), pipe joints, ventilation joints, metal joints, joints between metal sheets or frames, screws or joints in the substrate (width from 1 mm) must be sealed with a polyurethane sealant, 24 hours after the application of the epoxy primer.

Allow 24h of curing after the application of SurfaPaint Epoxy WB before applying SurfaDur R ThermoDry.

Application

Mixing: Add <10% NPTA NanoPhos into the Base A before mixing the two components if thinning is required. Always mix Hardener B into Base A. Use a suitable bucket, paddle mixer or drill for thorough mixing. Continue mixing for one minute after Hardener B has been added to Base A. Ensure that the paddle mixer reaches everywhere in the mixing container. If needed, transfer the mixed materials into a new bucket for easier roller application. Application tools: brush, roller, airless spray.

Roller Application: A short nap, microfiber fabric, or thinner resistant rollers provide extremely fine, consistent finishes when rolling in direction with low splatter application. Do not use foam rollers. Start by brush painting perimeter edges. Apply the mixed product in two to three coats but avoid over rolling. Working time for SurfaDur R ThermoDry is 45 minutes at 25°C (77°F). Apply the next coat at least after 8 hours.

Airless Application:

Airless Machine Specifications	
Material Flow	11 lt/min
Maximum Pressure	270-300 bar
Air Intake Pressure	5-6 bar
Pump Filter	30 mesh
Hose	3/8"
Nozzle	0,027" – 0,031"

Avoid applying the product in high humidity conditions (> 75%) or there is a chance of rain for the next 12 hours.

Storage

Store only in the original container. Store the containers sealed in a cool and well-ventilated place. Keep away from direct sunlight. Keep far away from sources of heat, naked flames and sparks, and other sources of ignition. Keep containers away from any incompatible materials.

Health and Safety

Read the label before use. Safety Data Sheets are 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

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- 5L Metal Canisters combo (Part A | Base + Part B | Hardener)
- 20L Metal Canisters combo (Part A | Base + Part B | Hardener)

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- **Notes & Precautions:** Adverse weather conditions during or after the product application may affect the properties of the coating. Storage of closed containers, in controlled dry and enclosed space, away from sources of ignition and temperatures from 5°C to 35°C, for up to 18 months. The Technical Data should be read in conjunction with the Safety Data Sheets. The current edition of this technical data sheet automatically cancels any previous one concerning the same product. For more information, please contact NanoPhos: info@NanoPhos.com
 - The technical data sheets and the recommendations for using NanoPhos products are based on our scientific knowledge, laboratory studies, and long-term experience. Therefore, the information provided must be considered indicative and subject to constant review in relation to the circumstances and each practical application. Furthermore, the product's suitability should be examined in each case for each specific use. The end-user bears complete & exclusive responsibility for any side effects that may arise from the incorrect use of the product.
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