

PRODUCT DATA SHEET

2000 PLUS REFLEX

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DESCRIPTION OF THE PRODUCT

Water-based, white coloured, liquid elastomeric protective membrane formulated with special fillers and additives that provide high solar reflectivity and infrared emissivity. The product is resistant to water stagnation and is ideal for application on large surfaces. Formulated by WINKLER Research & Development Laboratories.

FIELDS OF USE

2000 PLUS REFLEX is specifically formulated for the protection of smooth and slated bituminous membranes of any size.

It is also suitable for the treatment and surface protection of brick, wood, concrete, natural stones, fiber-cement, and metal roofs.

For metal roofs, to ensure optimal results, any rust must be removed and an anticorrosive primer coat of **white WINGUM PLUS H₂O** or **WINGUM PLUS H₂O REFLEX** (300g/m²) should be applied.

Ideal for applications where improved thermal insulation is required and to reduce heat irradiation from the sun, resulting in energy savings for building air-conditioning and a significant efficiency increase for solar and photovoltaic panels.

SURFACE PREPARATION

Thoroughly clean the substrate to remove dust, loose or friable material, and any foreign or non-adherent substances.

To check the substrate moisture and prevent the formation air bubbles caused by vapor pressure, cover the surface with a polyethylene sheet sealed with adhesive tape on the side exposed to the sun and check after 24 hours. If no condensation is observed, proceed with the application of **2000 PLUS REFLEX**. If condensation is present, wait until the substrate is fully dry before applying.

For powdery or weak concrete substrates, it is recommended to apply a preventive coat of **WINFIX CONCRETE**.

RECOMMENDATIONS

Do not add any additives.

Do not use the product if the packaging is damaged.

Do not dilute with water or solvents.

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WARNINGS

If **2000 PLUS REFLEX** is applied over a polymer-bitumen membrane, ensure that the membrane has undergone at least 180 days of oxidation.

Apply **2000 PLUS REFLEX** at temperatures between +5°C and +35°C.

Protect the treated surface from water, rain, and snow for at least the first 24 hours after application. Avoid application under conditions of high night-time humidity.

APPLICATION

The product is ready to use and should be applied on a clean, dry surface using a roller, brush, or airless spray gun. Apply **2000 PLUS REFLEX** in a uniform coat to achieve the desired thickness.

The product can be applied in a single coat; however, on slated bituminous membranes, to ensure a uniform protective layer, apply at least two coats, allowing 24 hours between the first and second application.

To extend the reflectance of **2000 PLUS REFLEX**, once the surface is completely dry (minimum 24 hours after the final coat), it is recommended to apply **WINCLEAN**, a transparent protective membrane with low dirt retention (consumption approx. 80 g/m²). Regular cleaning will further enhance performance and maintain surface brightness.

CONSUMPTION

0.6 kg/m² on smooth bituminous membranes and various substrates

0.9 kg/m² on slated bituminous membranes, applied in two coats

PACKAGING

5-10-20 kg buckets

STORAGE

The product in its original and undamaged packaging, can be stored for up to 12 months. Store at temperatures between +5°C and 35 °C. The product is not frost-resistant.

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SAFETY INSTRUCTIONS

PRECAUTIONS

For safety information, the user must refer to the latest Safety Data Sheet (SDS), prepared in accordance with applicable regulations. The SDS contains detailed information on the physical, toxicological, and safety characteristics of the product.

DISPOSAL AND ENVIRONMENTAL PRECAUTIONS

Do not release the product or empty containers into the environment. For detailed disposal instructions, refer to the most recent Safety Data Sheet (SDS).

TECHNICAL FEATURES (average value)

FEATURES	STANDARD	RESULT
Appearance	-	Fluid Paste
Colour	-	Reflecting White
Density at +20°C	EN ISO 2811-1	1,5 ± 0,05 g/cm ³
Solid content	EN ISO 3251	70 ± 2 %
pH	UNI EN 8490-4	9 ± 1
Brookfield viscosity at 20°C	UNI EN 8490	10.000 + 1.000 cPs

PERFORMANCE OF THE PRODUCT IN SERVICE

FEATURES	STANDARD	RESULT
Operating Temperature	-	-20°C to + 80°C
Resistance to Atmospheric Agents	-	Excellent
UV Resistance	-	Excellent
Resistance to Standing Water	-	Excellent
Water Absorption after 7 Days Immersion	ASTM D 471	14.8% (requirement ≤ 20%)

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ADHESION AFTER 25 SUN-RAIN CYCLES ACCORDING TO UNI EN 10686: 1998

Substrate	Before Sun-Rain Cycles	After Sun-Rain Cycles	Requirement
Concrete	1.28 N/mm ²	1.09 N/mm ²	≥ 1.0 N/mm ²

SUPPORT ADHERENCE ACCORDING TO ASTM C 794

Substrate	Dry substrate	After 7 days Immersion in Water	Requirement
Bituminous membrane	0.74 N/mm ²	0.40 N/mm ²	≥ 0.34 N/mm ²

TENSILE STRENGTH AND ELONGATION AT BREAK AFTER 14 DAYS ACCORDING TO ASTM D 2370

Breaking Strength	Elongation
2.8 N/mm ²	158 %

TENSILE STRENGTH AND ELONGATION AT BREAK AFTER 500 HOURS (≈ 5 YEARS) OF ACCELERATED AGEING (ASTM D 2370)

Breaking Strength	Elongation
2.95 N/mm ²	103 %

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VOLATILE ORGANIC COMPOUNDS EMISSION

PARAMETER	MAX. ALLOWED CONCENTRATION ($\mu\text{g}/\text{m}^3$)
TVOC after 3 days	≤ 750
TVOC after 28 days	≤ 60

Test performed by the EUROFINS Institute according to EN 16516, ISO 16000-3/6/9/11 and ASTM D5116-10. Test report n. 392-2017-00404102_G_EN_02.

The product complies with the requirements of Directive 2003/53/EC.

PRODUCT FOR PROFESSIONAL USE ONLY

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