IDROVAL REFLEX
Water based paint with high solar reflective properties in one single layer

DESCRIPTION OF THE PRODUCT

Water-based elastomeric white-coloured liquid protective membrane, based on special charges and additives which give to the product high solar reflectivity and emissivity to infrared, resistant to water stagnation. Ideal for large surfaces, formulated by VALLI ZABBAN's research & development Laboratories.

USE FIELD

Product used to protect smooth and slated bituminous membranes and roofing, also flat as: cement, fiber-cement, concrete, metal roofs, in this last case, in order not to compromise the good result of the job, it may be necessary removing the eventual rust and apply a coat of LIQUIGUM PLUS or LIQUIGUM REFLEX white (300 g/m²), as anticorrosive bottom. Where you need to improve thermal insulation and lower the heat irradiated by the sun with a consequent energy-saving for conditioning of buildings and a considerable energy increase of solar and photovoltaic panels.

SURFACE PREPARATION

Accurately clean the support to eliminate: dust, crumbly parts, foreign or bonding-proof matters. Check for possible humidity contained in the support to avoid onset of air bubbles due to vapour pressure. The best way to find out if there is any hidden humidity contained in the support is the application of a polyethylene sheet over the surface of the support and sealed with painter's tape. Leave this exposed to the sun and check for water condensation after 24 hours. If there is no condensation water, apply IDROVAL REFLEX, on the contrary, wait for full drying.

WARNING

In case IDROVAL REFLEX should be applied on bituminous membranes, the modified membrane must have undergone at least 180 days of oxidization before to applying the product. Apply IDROVAL REFLEX at temperatures between +5°C and +35°C. Protect from water rain and snow during the first 24 hours. Do not apply in presence of high night humidity.
Do not add any additive.
Do not use the packaging if damaged.
Do not add water or solvents.

APPLICATION

The product is ready to use and can be applied by roller, brush, large paintbrush, steel plastering trowel and spraying airless gun. Apply the product in a uniform coat in order to get the ideal thickness. IDROVAL REFLEX can be apply also in just one coat. On a slated bituminous membrane you'll need, to ensure uniformity of the protective layer, to apply the product in at least two coats, waiting 24 hours from the first and the second hand. To extend the reflectance of IDROVAL REFLEX, it is advisable to apply, once dry (at least 24 hours after the last coat), IDROVAL REFLEX PROTECT, transparent protective membrane with a low dirt hold (consumption about 80g/m²), paired with a periodical cleaning.

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CONSUMPTION
0.600 kg / m^2 on smooth bituminous membrane and various substrates
0.900 kg / m^2 on slated bituminous membrane, in two coats.

PACKAGING
20kgs pails.

STORAGE
The product in its undamaged packaging can be stored for 12 months. Please store it at temperatures between +5°C and +35°C. No frost-proof.

SAFETY INSTRUCTIONS

PRECAUTIONS
For information about safety, user must refer to the most recent Safety Data Sheet, edited in accordance with the regulations in force, which contains physical, toxic and other data about the product in use.

ECOLOGY
Do not dispose the product and/or empty containers in the environment. Consult the most recent Safety Data Sheet for further information about disposals.

TECHNICAL FEATURES

Look:	Fluid paste
Colour:	White
Density at 20°C (g/cm^3):	1.50 + 0.05
Solid content (%):	72 ± 2
PH:	9 ± 1
cPs brookfield viscosity at 20°C:	20000 ± 2000

OPERATIONAL PRODUCT PERFORMANCES

Operational temperature:	-20°C + 80°C
Resistance to atmospheric agents:	Good
Resistance to U.V. rays:	Good
Resistance to water stagnation:	Good
Water swelling (% mass) Immersed in distilled water for 7 days	18,7% (requirement <20%)

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Adhesion after sun-rain cycles, 25 cycles (UNI 10686:1998)

Support	Before sun-rain cycles	After sun-rain cycles	Required
Concrete	1,35 N/mm²	1,06 N/mm²	≥ 1,0 N/mm²

Adhesion to substrates (ASTM C 794)

Substrate	Dry substrate	Wet Substrate (Immersed in distilled water for 7 days)
smooth bituminous membranes	0,64 N/mm²	0,47 N/mm²

Tensile and elongation strength at break (ASTM D 2370)

Strength at break (N/mm²)	Elongation (%)
1,97	132

Tensile and elongation strength at break (ASTM D 2370) after accelerated weathering (500h)

Strength at break (N/mm²)	Elongation (%)
3,66	105

Results according to
ASTM E903-96
ASTM C1371
ASTM E 1980

Solar reflection index "SRI"	> 107,7%
Solar reflection factor "ρ_e"	0,85
Solar absorption factor "a"	0,14
Emissivity "ε"	0,92

Volatile Organic Compounds Emission

Parameter	Max. allowed concentration (μ/m3)
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

Product meets with prescriptions of 2003/53/CE Directive

To the best of our knowledge, the information contained in this prospectus are correct and accurate, but every recommendation and suggestion is given without any guarantees, as the using conditions are not under our direct control. It is advisable to always perform some preliminary tests. Our company reserves the right to modify the products and the content of this document without any warning. The present edition annuls and replaces any other previous edition. In case of doubt please consult our Technical support

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