

**GUMVERN WHITE FIBERS
FIRE RESISTANT****High reflectance,
fire resistant white liquid sheath**

Description: White fibre-reinforced liquid waterproofing membrane, formulated with selected synthetic resins in aqueous dispersion and special additives which give high solar reflectance properties. The formulation of the product features particular additives, which confer self-extinguishing properties.

Advantages:

- Reduces the fire risk of the coating in the event that burning embers fall on the roof.
- Ensures excellent thermal insulation by creating a highly reflecting barrier against UV rays, reducing both the temperature on the external surface and improving thermal well-being inside living spaces.
- Reduces the energy consumption of air conditioning in summer.
- Improves the yield of electricity generation plants made with photovoltaic panels, thanks to its high solar reflectance and thermal emissivity values.
- Reduces concrete carbonation phenomena.
- Long-lasting waterproofing resistant to weathering.
- Resistant to standing water.
- Cold laying, directly on the old bituminous membranes without the need to remove them (eliminates the risk of fire during installation).
- Perfect adherence, suitable for complex construction details and resistant to micro-cracking.
- Good resistance to foot traffic and mechanical stress.
- Low maintenance, does not require additional protection.
- Odourless, non-flammable product.
- Non-toxic product, free from solvents.

Applications: To cover and waterproof:

- Flat roofs, balconies, terraces, bathrooms, showers, saunas, bituminous surfaces, tiles, sheet metal roofs and retaining walls.
- Concrete tanks for containing non-drinking water and other non-acidic and/or particularly aggressive liquids.
- Concrete balconies, before gluing the stoneware or clinker tiles where the solution with polymer-bitumen membranes is not feasible.
- Fibre-cement, wood, polycarbonate, and metallic surfaces.

Surface preparation:

- Make sure that the surface is free from detached parts, loose debris or non-adherent parts, coatings, rust, powder, or release oils; carefully clean the surfaces, which must be sound and dry. The solidity and efficiency of the water run-off points must be checked before application.
- The waterproofing must be protected from rain, dew, and fog until completely dry. Humidity and low temperatures lengthen drying time.

Application:

- Apply by brush, broom, roller or spray.
- Mix well before use.
- As a first coat, apply Gumvern White Fibers Fire Resistant diluted up to 10% with water.
- The second coat, applied crosswise to the first, has to be applied as is on the film of the dry first coat.
- It is possible to interpose non-woven fabric between the two coats to increase its performance and resistance to mechanical traction.
- After use, wash tools with water and, if the product has dried, it is advisable to remove it with hot water or with the common synthetic thinners.

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Consumption: Application must include at least two coats* to give uniform colour to the waterproofing layer, using a total of 1.6 - 2.0 kg/m² of Gumvern White Fibers Fire Resistant depending on the nature and degree of porosity of the surface and the thickness to be obtained (*depending on the type of support, to reach the expected consumption quantities, it may be necessary to apply additional coats of the product, paying attention in any case not to exceed the quantity used for each application). Product consumption increases in the case of adding non-woven reinforcement in polyester reinforced with glass fibres (such as Gum Tex 70 PLUS) of 70g/m² between the two coats. In this condition, total consumption of the product, also depending on the surface on which it is applied, can vary overall between 1.8 and 2.4 kg/m².

Warnings:

- The product is ready for use, do not use mechanical mixers; if necessary, mix manually.
- Apply the product at ambient temperatures between +5 °C and +35 °C and when there are no weather conditions such as fog, rain, or frost, and in any case avoid extreme situations of cold and heat, even during drying of the film.
- Check (according to UNI 10329) that the residual humidity content of the cement surface to be treated is ≤ 5% by weight (for screeds with a density of 2000 kg/m³).
- Avoid using in the presence of damp backpressure phenomena. When applying on new cement substrates, wait for its curing.
- We recommend applying the product on surfaces not subject to standing water.
- We advise against applying the product on newly applied bituminous surfaces, which could still release hydrocarbons and cause adhesion problems of the film on the sheath.
- If the roof includes insulating packages, a shorter restore is advisable.
- When applying on polymer-bitumen membranes or bituminous surfaces, check in advance the adhesion of Gumvern White Fibers Fire Resistant before applying.
- Protect from frost, do not expose the package to temperatures below +5 °C; once frozen, the product can no longer be recovered.

For further information, request the safety data sheet.

Packaging: 1, 5, 10, 20 and 25 kg metal or plastic pails.
200 kg metal drums.

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Technical data:

MAIN CHARACTERISTICS		
Appearance		Fluid thixotropic paste
Colour		White
Shelf life in closed original packaging		24 months
Solid content (<i>m/m at 130 °C</i>)	EN ISO 3251	(63-71)%
Brookfield viscosity (<i>at 20 °C, spindle 5; 10 rpm</i>)	EN ISO 3219	(32,000±6,000)cP
Density (<i>at 20 °C</i>)	EN ISO 2811-1	(1.36-1.44) kg/L
Dust-free time		4 hours*
Complete drying time		At least 24 hours*
Operating temperature		-20°C - +90°C
PERFORMANCE PROPERTIES - EN 1504-2 SURFACE PROTECTION SYSTEMS FOR CONCRETE (C COATINGS – PRINCIPLES: PI-MC-IR)		
Permeability to CO ₂	EN 1062-6	S _D > 50 m
Water vapour permeability	EN ISO 7783	Class I (S _D < 5 m)
Liquid water permeability	EN 1062-3	w < 0.1 kg/m ² ·h ^{0.5}
Tensile bond strength	EN 1542	≥ 1 N/mm ²
Reaction to fire	EN 13501-1	E

* Measurements have been recorded at a temperature of 23 °C and with 50% moisture. Declared data may vary depending on the thickness of the applied product and on the specific conditions of the construction site: temperature, humidity, ventilation, and absorptency of surfaces.

FIRE RESISTANCE CLASSIFICATION EN 13501-5:2016

Classification Report no. N2416/21

T2i Trasferimento tecnologico e innovazione s.c.a.r.l. (LAB no. 0170L)

Classification method	EN 13501-5:2016 Fire classification of construction products and building elements - Part 5: Classification using data from external fire exposure to roofs tests
Test method	CEN/TS 1187:2012 -Test 2 Test methods for roofs/roof coverings exposed to external fire
Classification	The Gumvern White Fibers Fire Resistant roof covering in relation to its external fire attack characteristics is classified: B_{ROOF}(t2) <i>Validity of the classification for the following fields of application:</i> - Roof covering – Gradient: all gradients. - On all combustible and non-combustible substrates with density not less than 20 kg/m ³ .

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SOLAR REFLECTANCE, THERMAL EMITTANCE, SOLAR REFLECTANCE INDEX

Test report of the Enzo Ferrari Engineering Department / EELab
University of Modena and Reggio Emilia



Solar Reflectance Index (SRI) [%] ASTM E1980-11	Thermal emittance (IE) EN 15976	Solar reflectance (SR) ASTM C1549-09	Surface temperature (T _s) ASTM E1980-11
95.0	0.874	0.768	46.5 °C

LEED CERTIFICATION REQUIREMENTS v 4.1 BD+C



SS HEAT ISLAND EFFECT CREDIT: ROOFS

Use roofing materials that have a Solar Reflectance Index (SRI) greater than or equal to the value shown in the table below for a minimum of 75% of the roof area.

Type of roof	Gradient	SRI
Low slope roofs	≤15%	82
Highly sloping roofs	>15%	39

Membranes painted with Gumvern White Fibers Resistant have an SRI > 82.



The advice and technical information provided represent HA ITALIA S.p.A.'s best knowledge of product properties and use. Considering the different situations of use of the products and factors beyond our control (media, working conditions, failure to comply with instructions), we cannot be held responsible for the results obtained. Before using the product, anyone who intends to make use of it is required to determine whether it is suitable for the intended use and assumes full liability for whatever may arise from its use.

HA Italia disclaims any and all liability arising from failure to observe the warnings mentioned in this data sheet and failure to comply with the requirements set out in the safety data sheet.

Data sheet no.: 20004255-REV01 dated 01.01.2024