

AQUASMART® HYBRID**Product Data Sheet****Very Fast Drying, Water Based, Fully Aliphatic Polyurethane Hybrid Coating For Waterproofing and Protection** **Description**

AQUASMART® HYBRID is a water based, very fast drying, aliphatic Polyurethane hybrid coating for waterproofing and protection. The product may be applied as a one-component material (under the commercial name **AQUASMART® HYBRID-MONO**) or can be used with a second component (booster) during cold weather for faster curing (under the commercial name **AQUASMART® HYBRID-2K**).

The product is easily applied on both vertical and horizontal substrates and forms a seamless, elastic and hydrophobic membrane.

 **Recommended For**

Waterproofing and Protection of :

- PU foam,
- Roofs,
- Light roofing made of metal or fibrous cement,
- Under tile applications such as wet rooms,
- Protection of concrete/reinforced concrete from carbonization.

 **Compliance**

CE: ETAG 005, Part 1 & Part 6 CPR-17/0922.

 **Features & Benefits**

- Water based
- Very fast drying
- Easy to apply & repair.
- Thixotropic
- Seamless.
- Elastic.
- Highly resistant to stagnating water (ensure proper adhesion-see suitable primers list).
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Excellent weather and UV resistance. The white color reflects much of the solar energy and so reduces the internal temperature of structures considerably.
- Easy coloring of product with almost any water based pigment paste available at hardware stores, subject to adequate tests.
- Compatible with all standard **ALCHIMICA'S** Primers.

 **Limitations**

Not recommended for :

- Unsound substrates (in some cases, application is possible with the use of geotextile reinforcement; please contact our technical service department for consultations).

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Application Prerequisites

- ✓ **Can be successfully applied on:** Concrete, fibrous cement, cement roof tiles, wood, galvanized steel, PU foam. For information about other substrates, please contact our technical service department.
- ✓ **Standard concrete substrate conditions :**
 - Hardness: $R_{28} = 15 \text{ Mpa}$
 - Humidity: $W < 10\%$
 - Temperature: $5-35^{\circ}\text{C}$
 - Relative humidity: $< 85\%$
- ✓ **Suitable Primers:** AQUADUR, AQUASMART®-DUR, AQUASMART®-PU PRIMER-2K or MICROSEALER-50, depending on the substrate. Please contact our technical service department for primer selection advice.

Application Procedure

Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities should also be filled.

- ✓ **Priming:** Apply recommended primer according to Technical Data Sheet specifications. For non-demanding applications (where standing water or negative water pressure is not an issue) prime with same material by diluting with 15% water. For more professional applications, apply primers as per above list or contact our technical department for further information.
- ✓ **Mixing:** Use a low speed (300 rpm) mixer. Although thinning is not necessary, the material can be further thinned by 5-10% water.
- ✓ **Application:** Apply with roller, brush or airless spraying in two or more coats.
- ✓ Do not apply under conditions of extreme wet weather or imminent rain or near freezing temperature.

Consumption

Applied with roller or brush :
 First coat: **0.6-0.8 kg/m²**.
 Second coat: **0.6-0.9 kg/m²**.

Applied by airless spraying: **0.5 kg/m²** per coat. Minimum total consumption: **>1.5kg/m²** for waterproofing, depending on project requirements. For use as a protective paint, recommended consumption is **0.5 Kg/m²**.

Shelf Life

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C. Once a pail has been opened, use as soon as possible.

Cleaning

Clean tools and equipment immediately with water.

Safety Information

The MSDS (Material Safety Data Sheet) is available upon request.

Packaging

Plastic pails of 12 kg (+125 gr booster), 20 kg (+ 200 gr booster)

Technical Specifications

In Liquid Form (Before application): 70% active substance.

Property	Units	Method	Specification
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25°C	15,000-40,000
Specific weight	gr/cm ³	ASTMD1475/DIN53217/ISO2811,@ 20°C	1.45-1.55
Required application temperature	°C	-	>5

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In Cured Form (After application):

Property	Units	Method	Specification
Service temperature	°C	-	-20 to 90
Hardness	Shore A	ASTM D2240/DIN 53505 / ISO R868	70
Tensile strength at break @ 23°C	N/mm ²	ASTM D412 / EN-ISO-527-3	5.0
Elongation @ 23°C	%	ASTM D412 / EN-ISO-527-3	>300
H ₂ O absorption	%	-	<5
QUV Accelerated Weathering Test	-	ASTM G53	passed (2,000 hours)

Classification According To EOTA (European Organisation Of Technical Approval)

Requirement	Performance	Harmonized Technical Specification
Minimum thickness	1.6mm	ETAG 005 – part 6
Water vapour diffusion resistance factor (μ)	~890	ETAG 005 – part 6
Resistance to wind loads	>50KPa	ETAG 005 – part 6
Statement on dangerous substances	Does not contain any	ETAG 005 – part 6
External fire performance	NPD	ETAG 005 – part 6
Expected working life	W2 (10 Years)	ETAG 005 – part 6
Climatic zone of use	S (Severe)	ETAG 005 – part 6
User loads	P1 to P3 (P3 REINFORCED)	ETAG 005 – part 6
Roof slopes	S1 to S4	ETAG 005 – part 6
Minimum surface temperatures	TL3 (-20°C)	ETAG 005 – part 6
Maximum surface temperatures	TH4 (90°C)	ETAG 005 – part 6

For more information on Hyperdesmo, Aquasmart & Hyperseal range of products and application methods
Please contact Alchimica Technical Service at info@globalbusinessbd.com

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