

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: $R_{28} = 15$ 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**.

Safety Information

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

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	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	1.45-1.55
Required application temperature	°C	-	>5

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.

Packaging

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

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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@alchimica.co.in

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CE 25 YEARS
EXPECTED
WORKING LIFE

