

VELVET AQUA PU

Two component, mat, aliphatic polyurethane water-based varnish

DESCRIPTION

Velvet Aqua PU is a 2-component, mat, aliphatic, polyurethane water-based varnish. It is ideal as a protective varnish over decorative coatings (cementitious & acrylic based systems) and patterns, as well as for wooden surfaces and mineral (cementitious based substrates. It is suitable for internal and external use.

USES

- For new and existing constructions
- Ideal as a protective varnish over decorative coatings (cementitious & acrylic based systems), offering additional colour stabilization
- It is applied over surfaces with stylish effects and patterns, such as metal imitations, mineral substrates and concrete, patterns with rust effect, «scratched», stencils, e.t.c.
- Suitable for mineral (cementitious based) floors
- (warehouses, parking areas, e.t.c.) offering exceptional hot tire resistance.
- Over wooden surfaces (parquet) and furniture applications, forming a surface with a velvety texture and mat appearance.

CHARACTERISTICS/ADVANTAGES

- Mat finish
- Internal and external use
- No yellowing
- Abrasion resistant
- Surface stabilizing, without chromatic alteration of the original colour shade
- Excellent chemical resistance
- Resistant against UV radiation
- Weak odour
- Water based, significantly low VOC
- Low consumption

PRODUCT INFORMATION

Composition	Water based aliphatic polyurethane
Appearance/Colour	Component A: Liquid, milky white Component B: Liquid, transparent Mixture: Liquid, milky white
Packaging	5 kg set Component A: 4 kg, plastic container Component B: 1 kg, metallic container
Storage conditions	In the original, closed, sealed and undamaged packaging, protected from direct sunlight and frost, at temperatures between +5°C and +30°C.
Shelf life	12 months from date of production

TECHNICAL CHARACTERISTICS

Density	1.05 ± 0.03kg/lt (+20°C)	
pH	7.5 ± 1 (+20°C)	
Viscosity (mixture)	25 ± 5 s	(DIN 4 Cup)
Abrasion resistance	22mg	(Taber test - CS10, 1000g, 1000cycles (ASTM D4060))
Hardness	71 sec	(König pendulum test – 7 days, 150µm wet film thickness (ASTM D4366))

APPLICATION INFORMATION

Substrate temperature	+5°C / +30°C
Environmental temperature	+5°C / +30°C
Relative humidity	≤ 75%
Mixing ratio	Component A: Component B = 4:1 b.w.

Consumption	Consumption depends on the substrate absorption, as well as on the application equipment. As a guide: 100-120 g/m ² per coat.
Pot life	~ 90 minutes (+20°C)
Overcoating	~ 60 minutes (+20°C)
Tack dry	~ 30 minutes (+20°C)
Walkability	~ 24 hours (+20°C)
Full cure	~ 7 days (+20°C)

The stated times are affected by the prevailing environmental conditions and especially by the temperature and relative humidity.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be sound, solid, dry and free of dust, loose particles and all types of contaminants. Clean it thoroughly (e.g. by wet scrubbing, water jet, e.t.c.) and allow it to dry.

EQUIPMENT

VELVET AQUA PU can be applied using a roller, brush or via spraying.

MIXING

Pour Component A into a clean container. Then add Component B and mix using an electric mixer at low speed (max. 500 rpm) for about 3 minutes. Observe the mixing time to avoid air entrapment.

APPLICATION

VELVET AQUA PU is applied on the properly prepared substrate, using roller, brush or via spraying. It is recommended to apply 2 coats, crosswise, observing the waiting time between them.

On new substrates, observe the following curing times of the substrate before applying the varnish:

Substrate type	Substrate curing time (+20°C)
Cementitious decorative layers/systems	~ 4 days
Acrylic decorative layers/systems	~ 24 hours
Mineral substrates	28 days

CURING

Protect from direct sunlight, rain and wind, for at least 24 hours after application.

TOOL CLEANING

Fresh material should be removed immediately from the application equipment using water. Hardened/cured material can only be removed mechanically.

IMPORTANT NOTES

- During application and curing, the prevailing environmental temperature must be between +5 °C and +30°C.
- Apply on stable, clean and suitably prepared substrates.
- Protect freshly applied product from frost, wind, rain and direct sunlight.

HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

According to the EU-Directive 2004/42, the maximum allowed VOC content for product category A.i. (wb) is 140g/l (2010) for the ready to use product. The maximum content of VELVET AQUA PU is 48,18 g/l VOC for the ready to use product.

Detailed information and instructions regarding the safe management of the product and in matters of Health & Safety, are provided in the most recent Safety Data Sheet (SDS), copies of which are available on the company's website www.marmoline.gr or upon request.

LEGAL NOTES

The information contained in this Product Data Sheet is based on the experience and current knowledge of the Company's R&D Department. All technical data stated in this Product Data Sheet is based on laboratory tests. Actual measurable data may differ due to conditions not subject to our control. The recommendations and application instructions must be considered by the user as indicative, and always given that the product has been distributed and stored based on the Company's instructions. As it is not possible to control the parameters/conditions of application of the product in practice, no guarantee can be provided for the result of each application. Therefore, no legal liability of the Company can be established based on the information and suggestions listed in this Product Data Sheet. It is the sole responsibility of the user to evaluate the suitability and applicability of the product for its intended use. The Company reserves the right to modify the Product Properties listed in this Product Data Sheet, without prior notice. Users should refer to the latest version of the Product Data Sheet, copies of which are available on the company's website www.marmoline.gr or upon request.