Data Sheet

Pava Idropol 98®

Opaque

Transparent two-component polyurethane top coat in water emulsion

Composition

Transparent two-component polyurethane product in water emulsion made from special resins and designed to allow intense cross-linking, fast curing and long pot-life. The product offers lightfastness (U.V.) with minimal yellowing and no chalking. Good resistance to weathering, diluted chemicals. Matt version. VOC lim 140 g/l - real VOC < 10 g/l (excluding water).

Fields of application

Made for opaque final coats (Topcoat) over epoxy and/or epoxy-polyurethane cycles to give good chemical resistance, maintain lightfastness and inhibit chalking of the underlying coatings. The product is treadable according to UNI EN ISO 10545-7 and UNI EN 14411 standards in relation to the system to which it is applied. On absorbent substrates it may produce a slight "wet" effect.

After suitable preparation of the substrate and application of a suitable adhesion promoter, it can also be applied to wooden floors (parquet), subject to verification of the stability of the planks. Operating temperature -10° C to +40° C.

Marking

EN 1504-2

Coating for concrete surface protection

- humidity control (2.2)
- protection against penetration risks (1.3)
- physical resistance (5.1)
- increased resistivity (8.2)

Certifications

- Protective coating of concrete according to EN 1504-2, PDO nr 141023 - 2013, Factory Production Control Body certification nr. 0546, certificate 2017, issuing CE marking.
- Fire certification class Bfl-S1 (EN 13501-1).
- Product capable of inhibiting bacterial proliferation in accordance with UNI 1102I.
- EPA (Environmental Protection Agency) certified for very low emissions, according to EN-ISO 16000 and AgBB 'Assessment procedure for VOC emissions from construction products' Report no. 161710-003, 28/10/2016.
- LEED compliance for low emitting materials, EQ Credit 4.1-4.2-4.3, reduction of pollutant emissions (VOC) inside buildings.

Quality

The product undergoes careful and constant testing in our laboratories. The raw materials used are rigorously selected and controlled.

Technical specifications	Results	Method
Catalysis ratio	Combine 100 parts by weight of Base with 15 parts by weight of Reagent. All Pava formulations must be mixed thoroughly before proceeding to the various application steps. Manual mixing is not permitted; incorrect mixing will result in incomplete hardening of the coating.	13 IST 21

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	Pre-mix component A (Base) with a propeller/blender and then add the second component B (reagent) and mix for a minimum of 3 minutes until the mixture is homogeneous in density and colour. Combine the different components, taking care to mix thoroughly by stirring at low speed in order to obtain a homogeneous colour mixture. It is recommended to take particular care when mixing all the mixture within the individual components; with the help of a spatula/knife scoop out the product from the walls/bottom of the pot in order to maintain the catalysis ratios.	
Specific Weight	1,00 - 1,20 g/cm³ at 20 ± 2 °C.	ASTM D 1475 EN ISO 2811-1
High Solid Content	52 -56 % according to internal test lab mode.	ASTM D 2369 EN ISO 3251
Flammability point	Non-flammable.	ASTM D 93
Viscosity at 25 ± 2°C	500 – 800 mPa s.	ASTM D 2196 EN ISO 3219
Dilution	This product can be diluted with clean, lukewarm water in a variable percentage depending on the type of substrate, from 5% to 30% or even more depending on use.	13 IST 21
Mixing duration	Maximum pot-life: 1.5 hours at 20 ± 2°C and approx. 65 ± 10% HR.	13 IST 22 EN 9514
Drying and curing	Touch-drying 3 - 6 h at approx. 20 ± 2°C and approx. 50 ± 10% HR. Film curing 3-5 days depending on ambient temperature; tendency to blister and cloud with low temperatures (< 10°C) and high R.H. (> 65%).	ASTM D 1640 EN ISO 866
Covering	After 12 hours depending on temperature, no more than 20 hours. Compatibility and overpaintability, consult Technical Department.	ASTM D 1640
Consumption and Yield	(theoretical per layer) 0.080 - 0.130 kg/m², at the recommended thickness of 50 - 65 µm.	13 IST 03
Film Appearence	Transparent opaque version.	-
Number of layers	One or two layers depending on the thickness and chemical-mechanical resistance required.	-
Tool washing	1st wash with water and 2nd wash with alcohol or thinner.	-
Warehouse storage	Component A (Base): store dry in a ventilated area for 12 months from the date of manufacture (lot no. on label with AAMMGG); Component B (Reagent): store dry in a ventilated area for 6 months from the date of manufacture (lot no. on label with AAMMGG); Before mixing, ensure that the product has been stored in a protected environment and at a temperature below 20°C. Do not expose packages directly to the sun. Fear frost.	-

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The system is not self-supporting according to UNI10966, but conditioned by the substrate; the specimens made not with film but according to UNI EN 13892-2. Results after 7 days at 25 ± 2°C.

Cls Adhesion (MPa) ASTM D 4541 EN 1542	> 2,0
Abrasion (1Kg 1000rpm) ASTM D 4060 EN ISO 5470/1	< 80 mg
Shore Surface Hardness EN ISO 866	> 98 A
Elongation Break	3 ± 1

Surface preparation

Properly prepare the substrate by mechanical or manual abrasion, sanding or shot-blasting. Remove all loose parts by reconstructing any missing volumes with suitably filled resin mixtures. Dust the surface thoroughly and apply a specific adhesion promoter according to the nature of the substrate.

Any imperfections or irregularities that may compromise the final aesthetic effect must be corrected by mechanical preparation and/or regularisation of the substrate before the subsequent products are applied.

Traces of oil, grease, paint, efflorescence, etc. must always be removed in advance and carefully, as well as chalking or removable portions.

In the presence of cracking processes and/or cracks in the substrate, carefully check the nature of these phenomena, assessing whether they are due to plastic shrinkage or structural-tension phenomena affecting the substrate itself. In the case of both static and dynamic phenomena, consult our Technical Office in order to intervene appropriately. No liability can fall on the product in the event that such cracking processes affect the product itself since, according to UNI EN 10966, these systems are not self-supporting.

Before proceeding with the application of Pava products, preliminary treatment of all critical points is mandatory (any cracks in the substrate, corners, edges, vertical lapels, expansion and/or structural joints, channels, gutters, grates, eaves fittings, guttering and downpipes, steps and thresholds, skylights, plant piping and through-bodies).

Application Conditions

We recommend applying the product at temperatures ≥ 10°C and ≤ 35°C and Relative Humidity ≤ 70%. Application under different environmental conditions could lead to aesthetic and/or technical defects of various kinds and failure to achieve the product's characteristics and performance. Consult the Technical Department in case of special situations.

Application

By brush, roller, plastic spatula; caution with applications in environments with R.H. greater than 65% (appearance of bubbles and stickiness). As a protective finish on decorative products, application by plastic trowel or roller is recommended, taking care to always dilute the product with water in the percentage suitable for the desired result. Carry out preventive tests.

Do not cover the cladding with non-breathable objects/materials until it has fully cured in order to avoid lightening and/or flaking.

On exterior surfaces particularly exposed to sunlight, it is preferable to use the pigmented product Idrogel 80 or the transparent products Pavarel ECO 64 or Pavakril.

Colours and packs

Transparent colouring. Available in the following packages:

Base kg. 1,340 + Reag. kg. 0,200 = total kg. 1,540 A+B

Base kg. 5,000 + Reag. kg. 0,750 = total kg. 5,750 A+B

Base kg. 13,340 + Reag. kg. 2,000 = total kg. 15,340 A+B

opaque version.

Warnings

We do not recommend the use of products that, upon opening the container, should show signs of instability and/or degradation including thickening, crystallization, gelatinization, sedimentation, flotation, etc. due to improper storage of the material (temperature/humidity) either during transport or in the final storage or finally for use after the expiration date

It is highly recommended that, before using Pava products, you attend the applicator course. Anyone who uses these products without being licensed to do so does so at his or her own risk and without the responsibility of the manufacturer.

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Technical Notes

With damp substrates or with counterthrust moisture ≥ 4% (measured with calcium carbide), blistering, blistering or detachment of the applied layers is possible.

In these cases, it is possible to manage the problem through the prior application of Trico Bar with a vapor brake function. Such a product should be applied in 2 coats for a total consumption of at least 1.5 kg/sqm. Consult the product's technical data sheet and the Technical Office for appropriate indications.

UNI Standard 11835

The UNI 11835 standard, in force since 2021, defines and certifies the figure of the applicators and commercial technicians of resin systems for horizontal and vertical interior and exterior surfaces, outlining their basic requirements, the set of knowledge, skills, autonomy and responsibilities that within the construction supply chain must distinguish and characterize these professional figures in their relations with public and private clients, companies, designers and specifiers.

The UNI 11835 standard incorporates the knowledge introduced by the new edition of the UNI 10966 standard and profiles the sector's operators more precisely, highlighting the sector's typical features. In addition, the standard delineates resin systems operators by dividing them into four professional figures (specialized resin systems installer, foreman resin systems installer, foreman decorative resin systems installer, and sales technician). For each professional figure, the relevant tasks are described, as well as the knowledge and skills required to perform them.

The field of resin coatings therefore requires, as described above, competence and professionalism. These can be certified according to UNI CEI EN ISO/IEC 17024 through a patent obtained through an exam (written, practical and oral test) taken with a third-party certified body, as defined by UNI 11835.

It is strongly recommended to join professionalizing activities in order to acquire the professional qualification license so as to possess the competences and skills listed in the prospectuses of the aforementioned UNI 11835 standard, which can be associated with level 4 as per the QNQ classification (Recommendation 2017/C189/03, Annex II). Therefore, no responsibility can fall on the manufacturer in case the operator is not in possession of the qualification license and the consequent validated skills, in case of improper use or flaws in the works carried out, as the products must be intended for strictly professional use.

Product for professional use

Keep out of the reach of children. During use and drying, ventilate the premises well. Do not eat, drink or smoke during use. Wear protective gloves and goggles during use and use the usual precautions for handling chemicals. In case of contact with eyes or skin wash immediately with plenty of water and seek medical advice. In case of ingestion contact a poison control center or doctor immediately. Air the premises before staying there.

The above products are found to have a low environmental impact and make it possible to abate solvent pollution while improving quality, safety and hygiene for the user. We recommend scrupulous compliance with the hygiene regulations in use for handling resins (Circ. Min. Lav. 46/1979 and 61/1989). For info ns safety data sheet.

QR-CODE

The label of each product shows the relevant QR-CODE for viewing and downloading the data sheet. In case of failure to download, please contact the Technical Department.

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