

Azienda con sistema di Gestione Qualità UNI EN ISO **9001** Certificato Certiquality



Data Sheet

# Ultrapol "T"

# Transparent solvent-based two-component polyurethane top coat

### Composition

Transparent two-component polyurethane finish made with special solvent-based resins; suitably formulated to allow intense cross-linking, fast hardening and long pot-life. The product guarantees gloss and resistance to light (U.V.) with minimal yellowing and no chalking. It also offers good resistance to weathering and diluted chemicals.

VOC lim 500 g/l - real VOC < 420 g/l (excluding water).

# Fields of application

Made for final layers (Topcoat) over epoxy and/or epoxy-polyurethane cycles to maintain gloss and 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 produces a "wet" effect or toning down of the original colour.

Operating temperature from -10°C. to +40°C. Carry out preventive tests to assess the final result.

#### Certifications

LEED compliance for low emitting materials, EQ Credit 4.1-4.2-4.3, reduction of the emission of pollutants (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	100 parts by weight of Base with 55 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 curing of the coating.	13 IST 21
	Pre-mix component A (Base) with propeller/shovel mixer, 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, collect the product from the walls/bottom of the pot in order to maintain the catalysis ratios.	
	Observe particular care in the partial use of the 'Part B - reagent' package and its subsequent closure and re-opening for re-use. In order to preserve the contents, it is necessary to apply pressure to the can once it has been closed again in order to allow as much air to escape as possible, and then to turn the can upside down for 3 to 5 minutes: this promotes the formation of a film of product near the edge of the lid, which reacts with the moisture to re-seal the contents and thus promote a longer life for the product inside.	

Specific Weight 1,00 - 1,20 gr/cm<sup>3</sup> at 20 ± 2 °C.

ASTM D 1475 EN ISO 2811-1



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High Solid Content	60 ± 2 % according to internal test lab mode.	ASTM D 2369 EN ISO 3251
Flammability point	> 21°C.	ASTM D 93
Viscosity at 25 ± 2°C	100 - 500 mPa s.	ASTM D 2196 EN ISO 3219
Dilution	Ready-to-use product; can be diluted with our PSP THINNER at 5 -10%.	13 IST 21
Mixing duration	2 hours at 20 ± 2°C and approx. 65 ± 10% HR.	13 IST 22 EN 9514
Drying and curing	By touch 80 - 100 minutes at 20 $\pm$ 2°C and approx. 50 $\pm$ 10% HR, Winter version. To the touch 6 - 7 hours at 20 $\pm$ 2°C and approx. 50 $\pm$ 10% HR, Summer version. Film hardening 4 - 5 days depending on ambient temperature, tendency to dulling and clouding at 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, Winter version. Compatibility and overcoating, consult Technical Department.  After 20 hours depending on temperature, no more than 30 hours, Summer version. Careful attention must also be paid to ambient humidity and the "dew point", which can affect the adhesion and overpaintability of the product.	ASTM D 1640
Consumption and Yield	(theoretical) 0.080 - 0.130 kg/m² per layer, with a recommended thickness of 50 - 65 $\mu m.$	13 IST 03
Film Appearance	Glossy or satin.	-
Tool washing	With polyurethane thinner or nitro thinner.	-
Warehouse storage	Component A (Base): store dry in a ventilated place for a period not exceeding 12 months from the date of manufacture (lot no. present on the label with YYMMDD;  Component B (Reagent): store dry in a ventilated place for a period not exceeding 6 months from the date of production (lot no. on the label with YYMMDD;  Do not expose packaging to direct sunlight. Protect against frost.	-

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  $25 \pm 2^{\circ}$ C.

Cls Adhesion (MPa) ASTM D 4541 EN 1542 > 1,5

Abrasion 1Kg 1000rpm ASTMD4060 EN ISO 5470/1 < 19 mg "T"

Shore Surface Hardness EN ISO 866 > 98 A

Elongation Break (%) > 1,5

# Surface preparation

Perfectly clean the surface, which must be sound, seasoned, dry and sufficiently rough to allow for effective and long-lasting adhesion of the coating to it (special attention must be paid to sanding the underlying paintwork). Residual and/or counterthrust humidity may lead to the formation of bubbles or localised lifting. Any imperfections or irregularities that may compromise the final aesthetic effect must be corrected by sanding and/or smoothing the substrate before applying the subsequent products.









In the presence of cracking processes and/or crazing in the substrate, carefully check the nature of these phenomena: whether they are due to plastic shrinkage, and whether they are due to tensional-structural phenomena affecting the substrate itself. In the case of both static and dynamic fissures/cracks, please consult our Technical Department in order to take appropriate action. No liability can fall on the product in the event that such cracking processes affect the product as, according to UNI EN 10966, these systems are not self-supporting.

Any traces of oil, grease, paint, efflorescence, etc. must be removed beforehand, as must any chalking or removable sections.

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

## Application Conditions

At temperatures of not less than 10°C, be careful with applications in environments with RH above 65% (appearance of bubbles and stickiness).

### **Application**

By brush, roller, spray, airless.

## Colours and packs

Available in the following packages with XA reagent: Base kg. 2,350 + Reag. kg. 1,300 = total kg. 3,650 B+R Base kg. 4,700 + Reag. kg. 2,600 = total kg. 7,300 B+R.

### **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.

### 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.



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# 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.

The information contained in the technical data sheet is the most up-to-date information available to us on which we reserve the right to make any necessary changes; however, this information must be considered as having no binding force and does not prove any legal contractual relationship or accessory obligation with the purchase contract. Since the use of the product also takes place outside of our control, responsibility for the incorrect use of the product lies exclusively with the user and therefore does not imply the assumption of any of our warranties and responsibilities for the final result of the workings. Any warranty statement for effectiveness purposes requires express and specific written confirmation by Pava Resine Srl. They also do not dispense the customer from the exclusive duty and responsibility of verifying the suitability of our products for their intended use and purposes; moreover, the customer is required to verify that the values given in the data sheet are also valid for the batch of product of his interest and are not superseded and/or replaced by later editions. This data sheet cancels and replaces the previous ones. For the rest, please refer to our General Terms and Conditions of Supply, in particular also regarding liability for any defects. Our General Terms and Conditions of Supply are available on our website at <a href="https://www.pavaresine.com">www.pavaresine.com</a>

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