

# Albicoat CL

Chemical-resistant pigmented epoxy formulation - for indoor use

## Composition

Solvent-free, pigmented two-component epoxy formulation designed for the chemical and food sectors; excellent chemical resistance and good mechanical strength. Free of Aromatic Amines and Phthalates and made with substances known and included in the specific positive lists permitted by Italian, European and American regulations.

VOC lim 100 g/l - real VOC < 10 g/l.

## Fields of application

On walls and floors of tanks, silos, plants and on any iron and concrete structure. Anticorrosive coating for interiors suitable for direct contact with foodstuffs (e.g. wine, fruit juices, drinking water, cereals, etc.).

Max. operating temperature <55°C.

## Marking

### EN 1504-2

- Coating for concrete surface protection
- protection against penetration risks (1.3)
- humidity control (2.2)
- physical resistance (5.1)
- resistance to chemicals (6.1)
- increased resistivity (8.2)

## Certifications

- Compliant with EU Regulation 213/2018, analysis performed by UNI/EN ISO 17025 accredited laboratory
- Conforme al Capitolo 21 del Codice dei Regolamenti Federali sec. 175.300(b) (3) (vii) - Contatto ripetuto con gli alimenti (tipi di alimenti III, IVB, VIA, VIB, VII e VIII nelle condizioni d'uso da D a G). Certificazione al fuoco classe Bfl-s1 (EN 13501-1).
- EPA (Environmental Protection Agency) according to EN-ISO 16000 and AgBB 'Evaluation procedure for VOC emissions from construction products' Report no. 162477-002, 19/01/2017.
- LEED compliance for low emitting materials, EQ Credit 4.1-4.2-4.3, inducing the emission of pollutants (VOC) inside buildings.

### 0474/20 CERTIFICATE No. MED 213419CS

Surface materials and floor coverings with low flame-spread characteristics.

Fire protection requirements of Marine Equipment Directive (MED) 2014/90/EU, according to standards of Regulation (EU) 2019/1397. Certified by Rina Services S.p.A. (Notified Body No. 0474).

ISO 17/6:2010

IMO 20/0 FTP Code Part 5.

## Quality

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

The Albicoat CL Pava resin system is particularly effective in the Maturation, Ageing and Refining phases of wine.

The maturation of a wine is the period necessary for it to harmonise its components into a balanced and eurhythmic whole. Precisely, at the end of the pure vinification phase, the sugar, due to the effect of the yeasts, is transformed into alcohol with the consequent development of secondary aromas. However, the wine is still in an immature phase, full of edginess and young, unripe flavours. Therefore, for a young red

wine, containers lined with suitable resin systems such as Albicoat CL Pava are recommended, which are able to guarantee the absence of metal contact (reductive environment) and a low thermal exchange that allows the wine greater stability and maturation; it is also easier to manage the one-part fermentation.

What is more, the poor adhesion of potassium bitartrate crystals on the Albicoat CL Pava system facilitates their precipitation, thereby facilitating tartaric stability phenomena. In wines that are particularly poor in tannins and anthocyanins, the use of the Albicoat CL Pava system is also an excellent means of favouring the stabilisation of the colouring matter without radically influencing the taste. In the wine ageing and stabilisation phase, it is however necessary to be able to store the wine in a balanced environment in order to obtain wines with organoleptic characteristics that are mainly linked to the softness of the tannins.

Hazardousness ADR to be verified with relevant safety data sheet under point 14.

Technical specifications	Results	Method
Catalysis ratio	<p>By weight: 100 parts by weight of BASE with 55 parts by weight of REAGENT.</p> <p>By volume: 100 parts BASE with 60 parts volume REAGENT.</p> <p>All Pava formulations must be mixed thoroughly before proceeding with the various application steps. Manual mixing is not permitted; incorrect mixing will result in incomplete hardening of the coating.</p> <p>Pre-mix component A (Base) with a propeller/shovel, then add the second component B (Reagent) and mix for a minimum of 3 minutes until the mixture is homogeneous in density and colour.</p> <p>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 the product from the walls/bottom of the pot in order to maintain the catalysis ratios.</p> <p>For the coloured version, it is recommended to use the complete packaging. If it is necessary to divide the packages, take care to mix the entire coloured component well in order to disperse the pigments evenly. With the aid of a precision balance, then divide the components, taking care to maintain the catalysis ratios of the individual elements in order to avoid poor performance.</p>	13 IST 21
Specific Weight	<p>A 1,40 - 1,44 g/cm<sup>3</sup> (*)</p> <p>B 1,30 - 1,35 g/cm<sup>3</sup> (*)</p> <p>1,33 - 1,38 g/cm<sup>3</sup> at 20 ± 2°C, according to colour.</p>	<p>ASTM D 1475</p> <p>EN ISO 2811-1</p>
High Solid Content	100 (±1) %	<p>ASTM D 2369</p> <p>EN ISO 3251</p>
Viscosity at 25 ± 2°C	<p>A 8500 - 10000 mPa s (*)</p> <p>B 2000 - 3500 mPa s (*)</p> <p>6500 - 9500 mPa s</p> <p>Viscosity Base + Reagent. + dilution 10%: 1400 - 2000 mPa s</p>	<p>ASTM D 2196</p> <p>EN ISO 3219</p>
Dilution	With ethyl alcohol (for food contact), 5 % to 12 %.	13 IST 21
Mixing duration	Pot-life 60 - 80 minutes at 20 ± 2°C.	<p>13 IST 22</p> <p>EN 9514</p>

Drying and curing	Dry to the touch after 12 hours at $20 \pm 2^\circ\text{C}$ at $50 \pm 10\%$ R.H. Curing of two layers: 6-8 days depending on ambient temperature. Tendency to matting and clouding at low temperatures ( $< 10^\circ\text{C}$ ) and high R.H. ( $> 70\%$ ).	ASTM D 1640 EN ISO 866
Covering	After 12 - 24 hours depending on temperature, no longer than 48 hours. Compatibility and overpaintability, consult Technical Department.	ASTM D 1640
Consumption and Yield	(theoretical) $0.300 \text{ kg/m}^2$ at the recommended thickness of approx. $200\text{-}250 \mu\text{m}$ per layer.	13 IST 03
Film Appearance	Glossy, shiny; tendency to yellowing and chalking due to UV exposure, wear and ageing. Prolonged contact with particularly aggressive chemical reagents may lead to a superficial colour change, but without affecting the integrity of the coating in its thickness.	-
Number of layers	One or more layers, depending on the thickness required.	-
Tool washing	With appropriate thinner.	-
Warehouse storage	12 months from the date of production (lot no. on the AAMMGG label) in the original, tightly closed packaging, in an airy, dry place, preferably at room temperature, not below $+ 5^\circ\text{C}$ . Do not expose packaging to direct sunlight. Protect against frost. Transport must not take place below $10^\circ\text{C}$ . Otherwise the lorry must be insulated.	-

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

Cl's Adhesion (MPa) ASTM D 4541 EN 1542	$> 2,0$
Abrasion (1Kg 1000rpm) ASTM D 4060 EN ISO 5470/1	$< 100 \text{ mg}$
Iron Adhesion (MPa) ASTM D 4541 EN 1542	$> 6,0$
Reaction to fire EN 13501-1	B <sub>fl</sub> -s1
Elongation Break	$< 1,5$

(\*) Technical specification in the certificate of analysis

## 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. Carefully dedust the surface 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 applying the subsequent products. Traces of oil, grease, paint, efflorescence, etc. must always be removed in advance and carefully, as must any flaking or removable portions.

In the presence of cracking processes and/or crazings 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 responsibility can fall on the product in the event that such cracking processes affect the product itself since, according also to UNI EN 10966, these systems are not self-supporting.

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.

## Surface washing

In the case of applications on concrete tanks containing drinking water, wine or beverages, rinse thoroughly before filling the tank. Specifically, proceed with hydro-washing with soda ash in an aqueous solution (approx. 5%), buffer with citric acid (1-2%) and rinse thoroughly with drinking water. If there is residual moisture in the substrate, the surface must first be treated with Trico Bar three-component product, according to the methods indicated in the relevant technical data sheet.

## Application Conditions

We recommend applying the product at temperatures  $\geq 10^{\circ}\text{C}$  and  $\leq 35^{\circ}\text{C}$  and Relative Humidity  $\leq 70\%$ . 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

Brush, roller, airless with substrate temperatures not below  $+ 15^{\circ}\text{C}$ .

Airless spray application:

- Minimum pressure 200 bar
- Flow rate 10 l/min
- Pipe diameter min. 8 mm ( $\frac{3}{8}$  inch)
- Nozzle 0.48 - 0.58 mm (0.019 - 0.023 inch)
- Spray angle  $40^{\circ}$  -  $80^{\circ}$

Room temperature at least  $+ 20^{\circ}\text{C}$  and 60% HR.

At low temperatures, the use of a heater is recommended.

## Colours and Packs

Available in the following packages:

Base kg. 8,300 + Reag. kg. 4,565 = total kg. 12,865 A+B.

## 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  $\geq 4\%$  (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.

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 [www.pavaresine.com](http://www.pavaresine.com)

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