

CEDRIA Intumescent Colourless Varnish B-19 Technical Sheet

Professional Range

Product Description

Intumescent Colourless Varnish water-based, two-component high performance product. When exposed to heat or flame, it creates an insulating and protective foam of low thermal conductivity, insulating the surface from thermal transmission and the destructive action of fire, preventing toxic and harmful fumes development.

Properties

- **Certified in accordance with EN 1363-1:2012 which guarantees a Fire Resistance of up to 90 minutes. Tested on wood**
- Offers a finish with excellent transparency whilst maintaining the visual appearance of wood.
- Free from halogenated compounds, therefore, the gases would not be toxic in case of fire.
- Classification valid for the protection of untreated wooden surfaces against fire.
- The highest fire resistance classification for wood is achieved by applying this treatment, as it meets the requirements of the CTE for construction elements.

Recommended Uses

Suitable for indoor use.

Beams, pillars and other wooden elements.

For floors where high mechanical and chemical performance is required, it is recommended to apply our CEDRIA 2C INVISIBLE VARNISH*¹ as a topcoat. In environments where the relative humidity is higher than 65%, we recommend forcing a decrease in ambient humidity (using hot air cannons, dehumidifiers, industrial dryers, etc.) during the application of the varnish to achieve its drying and, immediately afterwards, apply a top-coat such as our CEDRIA 2C INVISIBLE VARNISH* 1.

Technical Characteristics

Resin	Formaldehyde melamine resin
Finish	Satin (final Gloss after 15 days of drying)
Odour	Distinctive odour
Viscosity	Brookfield 1400-2200 mPa.s (L3, V20 25°C)
Density (20°C)	1.28 kg/l
Solvent Type	Water
VOC	Contains 18 g/l. Limit value 2004/42/EC-IIA cat. j) is VOC max. 140. g/l (2010)
Drying	Touch: 4 hours. Repainting: 8-12 hours. Final drying: 24-48 hours Total hardness: 7 days (depending on environmental conditions)
Application Conditions	Maximum Relative Humidity 65% Temperature between 5° and 35°
Storage	Conserve inside at temperatures between 5°C and 35°C
Container sizes	5 Kg and 25 Kg
Utensils and Cleaning	Brush, roller or spray-gun. Clean with water
Colours	Colourless
Coverage	The amount will depend on the fire resistance required. See table on page 2
Mixing ratio	Comp. A: 13 - Comp. B: 7 (in weigh) // Comp. A: 1l - Comp. B: 436ml (in volume)
Mixture pot life:	Approximately 6 hours

Safety

- All current legislation must be followed in the case of storage and handling.
- Storage time: use preferably within 6 months, kept in a closed container and in the storage conditions recommended in the Technical Characteristics section.
- Prevent the product or product residues coming into contact with water courses. Remember: the care and protection of the environment is the legacy for our future generations.
- When spraying, wear a gas filter mask and protective goggles
- Keep out of the reach of children.

Application and Surface Preparation

The intumescent's good results depend on the surface preparation degree; it is therefore essential to follow these instructions before applying the product:

1. The wood should be dry (with less than 18-20% humidity).
2. The wood should be free from dust, grease and other substances.
3. Before applying CEDRIA B-19 INTUMESCENT COLOURLESS VARNISH it is advisable to sand the wood in the direction of the grain using a 60 grit sandpaper to improve adhesion. It is advisable to carry out an adhesion test on a small area before applying the product to the entire assembly.
4. Stir (do not shake) each of the two component vigorously with a spatula, and add COMPONENT B over COMPONENT A, mixing them well until a uniform mixture is achieved. The mix ratio is 13 parts component A and 7 parts component B (by weight) In case of lengthy treatments, it is recommended to stir the product regularly to ensure homogeneity.
5. Once both components have been mixed, the product is ready for use. Apply the product during the component A + component B mixture service life (approximately 6 hours, depending on ambient temperature). After this time, do not use the remaining material and discard it.

New Woods Application

- It is essential to prepare the surface before applying the varnish. See the Surface Preparation section.
- In addition, as insecticide treatment, apply first a coat of CEDRIA FONDO/IMPRIMACION TRATANTE PLUS*1.
- Apply CEDRIA B-19 INTUMESCENT COLOURLESS VARNISH. Dosage: See performance table according to the required fire resistance. Drying time between coats 8-12 hours, depending on load.

Maintenance

- It is essential to prepare the surface before applying the varnish. See the Surface Preparation section.
- Remove traces of previous products by sanding or stripping the surface with CEDRIA PAINT STRIPPER GEL *1 in order to improve adhesion.
- Apply CEDRIA B-19 INTUMESCENT COLOURLESS VARNISH. Dosage: See performance table according to the required fire resistance. Drying time between coats 8-12 hours, depending on load.

Table of certified dosages:

MINUTES RESISTANCE	WOOD THICKNESS (cm)	TOTAL DOSE Q (Kg/m ²)	ILLUSTRATIVE NUMBER OF COATS
≤ 45	<3	0.67	2-3
	2 - 6	0.37	1-2
	7 - 9	0.3	1
	> 9	0.24	1
60	<3	0.93	4
	2 - 6	0.63	2-3
	7 - 9	0.57%	2
	> 9	0.53	2
90	<3	1.47	6
	2 - 6	1,15	4-5
	7 - 9	1.13	4-5
	> 9	1.09	4

NOTE: To ensure the correct fire resistance it is **ESSENTIAL** to respect **TOTAL DOSE** by applying the necessary coats to ensure the recommended product load. This number of coats will vary depending on the substrate and application system used.

In dosages for 90-minute Fire Resistance times, the finish may experience a slight loss of transparency.

The recommended loads are based on results obtained in laboratory tests.

If necessary, it is the responsibility of the consumer to test the product for substrates and/or sections other than those certified by 3ABC Lasures, S.L.

Indications for Use according to the spraying System-Equipment recommended by CEDRIA

Equipment:	Airless (high pressure "airless" system, the paint is sprayed at high pressure and without compressed air).
Material Pressure:	From 140 bar.
Nozzle:	17 or higher. Choose an appropriate nozzle for the desired fan.
Safety:	Wear a gas filter mask and safety goggles

IMPORTANT: Before spraying the varnish it is necessary to remove it until it is completely homogenized.

Additional Recommendations

- CEDRIA B-19 INTUMESCENT COLOURLESS VARNISH is compatible with previous and subsequent applications of most water-based products. For improved safety, a previous test is recommended
- Drying times will vary depending on temperature, relative humidity, product load and application method.
- The performance and behaviour of the product may vary depending on the type of surface.
- When sanding avoid using metallic scouring pads, steel wool or any other tool that can leave metal remnants.

Quality Guarantee

CEDRIA products have been developed, manufactured and sold under the most rigorous quality standards. These recommendations are made in accordance with the current state of our knowledge and provide general information about the application and use of the products. Given the variety of substrates, uses and application techniques, the purchaser/user remains responsible for checking the materials, their application and the final result. For this reason, the purchaser/user is advised to test the product prior to the final application.

*1: See the Technical Sheet for the product.