

**Fire-resistant acrylic modified chlorinated rubber coating.
Great sealing efficiency and good aesthetic finish.**

Description

Villatherm D Esmalte is a fast drying one-component solvent-based coating used in intumescent systems for the protection of metal structures, certified in accordance to the Euroclassification reaction to fire regulations.

Villatherm D Esmalte is designed to provide a coloured finish to the intumescent system, and specifically, to provide essential protection in outdoor environments up to environmental category C3 (ISO 12944).

Characteristics

- Good waterproofing ability to rainwater and condensation which may affect the intumescent paint.
- It does not affect the expansion of the intumescent foam.
- Good gloss and color retention.
- Ease of application.
- Allows high build application.
- Fast drying.
- Applicable at low temperatures (-5°C).
- It provides anti-carbonation properties to concrete.
- It can be applied as an aesthetic coating in anticorrosive systems.

Recommended uses

- Essential as sealant for exterior intumescent systems.
- Provides an aesthetic finish of any color on intumescent paint.
- Suitable for use indoors and outdoors, in workshops, new constructions, on site and maintenance work.
- Applicable as a finish on chlorinated rubber systems, acrylic, vinylic or epoxy intermediate.
- In all types of moderate rural, urban, and industrial environments.
- Not suitable for use in immersion.
- Long-term recoatability.

Certifications and approvals

- Certified according to UNE -EN 13501-1: 2007 regulation: reaction to fire euro classification A2 -s1, d0, which is equivalent to the previous M0 (UNE 23727: 1990) .

Basic data

The following data was calculated at 23 ° C and 60% RH:

Colour:	RAL color chart
Finish:	Satin
Volume solids:	40%± 3%
Density:	1.40 ± 0.05 g/ml
Indicated dry film thickness:	Min: 40 µm Max: 100 µm
Theoretical spreading rate:	10,0 m ² /l (40 µm) 4,00 m ² /l (100 µm)
Dry to touch (40 µm):	40 min
Fully dried (40 µm):	4 hours
Overcoat interval:	Min: 2 hours Max: unlimited
VOC content	490 g/l (European directive 2004/42/CE)

Data table for drying and recoatability (40 µm dft)

Temperature*	5 °C	15 °C	25 °C	40 °C
Dry to touch	2 h	1 h	40 m	15 m
Fully dried	12 h	6 h	4 h	2 h
Recoatability	8 h	4 h	2 h	30 m

* Referred to substrate temperature.
d: days; h: hours; m: minutes

Protecflam System standard

Primer:	AK20 – Villatherm D Primer *
Intumescent coating:	TH02 – Protecflam
Finish:	CC04 – Villatherm D Esmalte

* It is possible to apply other primers.

Additional technical information

- Technical Bulletin 003. Ed.04-15. Protecflam system.
- Technical Bulletin 005. Ed.01-11. Intumescent paint thickness measurement.

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Surface preparation

Villatherm D Enamel is especially suitable as a finishing topcoat of the intumescent system accordingly on intumescent TH02- Protecflam - please follow the recoatability recommendations on its corresponding data sheet.

The surface should be clean, dry and free of contaminants to ensure adhesion of the topcoat. Only apply once the required intumescent thickness has been estimated.

Villatherm D Esmalte can be used as an enamel topcoat on anticorrosive systems and it can equally be applied to surfaces which are clean, dry and free of contaminants.

Application on concrete: previously seal the surface with AC04- PV. Acryl Impregnation.

Application instructions

Villatherm D Esmalte is supplied as a one-component system. It must be stirred mechanically to obtain a homogeneous product. Adjust the viscosity using the recommended thinners. Correct viscosity for application is achieved at a paint temperature above 15 ° C.

Adequate ventilation is recommended during application, especially in confined spaces to facilitate drying and solvents evaporation.

Thinner	VD-200P
Airless Spray	Dilution: 0-3 % by volume Nozzle diameter: 0.017" a 0.023" Nozzle pressure: 150-200 bars
Airbrush gun	Dilution: 10-15% en volumen Nozzle diameter: 0.070"-0.086" Nozzle pressure: 3-4 bars
Brush / Roller	Dilution: 0-5% v by volume

Clean equipment with cleaning solvent after application. Due to quick drying, for prolonged applications it is recommended to wash the application equipment periodically to maintain optimal operating conditions.

Application conditions

- The temperature of the substrate should be between 5 ° C and 40 ° C with a maximum relative humidity of 85 %.
- To avoid condensation, the substrate must be 3 ° C above dew point.
- Do not paint if there is dew and avoid painting in hours of maximum heat or in full sun.

Observations

- Although **Villatherm D Enamel** provides good coverage in one layer, a second coat is recommended especially in welds and sharp edges to enhance its protection.
- Similarly, in some low-opacity colors as it can be the case for red, yellow and orange, the application of an extra coat is recommended.
- Excessive application or an excessively high dry thickness can prolong the drying time and produce surface defects.
- During spray application the appearance of yarns or threads typical of this kind of physically drying paints can occur. This does not affect its performance or final aesthetic finish.
- The theoretical performance may vary depending on several factors including the method of application, surface roughness, losses during preparation and implementation, excessive dilution or application on uneven surfaces.
- The product is not designed for very corrosive environments (greater than C3) or for steel in poor condition.
- Long-term recoatability depends on the preexisting conditions in which of the coating.
- Not suitable for continuous immersion in water or continuous condensation.

Safety precautions

The security labels in the containers provide the necessary information for proper handling. It is important to meet the requirements of any relevant regulation. As a general rule, inhalation of solvent vapours and paint mist must be avoided, as well as contact with liquid paint on the skin and eyes. When paint is applied in confined spaces, forced ventilation should be provided, together with appropriate respiratory protection of the skin and eyes, especially when applied with a gun.

Further information is accessible on the Safety sheet FDS readily available on our website: www.pinvisacoatings.com

Packaging and storage

Sets of 4 l, 20 l.

Keep for 12 months in the unopened original packaging, in a controlled environment at a temperature between 5°C and 35°C and away from heat sources.

After that period of time, it is recommended not to use the product and consider a possible re-inspection in our premises