

PLAMCOR® - 5

intumescent fireproof coating
(TU 2312-104-12288779-2015)



Quality management system
is certified according to ISO 9001

Description

This is a two-component composition comprising epoxy base and aliphatic polyamine hardener. It is notable for high content of nonvolatile substances, and allows formation of a three-layer coating with the high fire-retardant performance. May be applied at a temperature of up to minus 5 °C.

Recommended use

Protection against hydrocarbon fire and corrosion of metal structures, in the moderate, moderately cold and cold weather in all types of atmosphere according to GOST 15150 including open industrial atmosphere.

It is used in complex coating systems involving primers ZINEP (TU 20.30.12-022-12288779-2018), ISOLEP-primer (TU 2312-067-12288779-2008) and ZVES (TU 20.30.12-004-12288779-2017).

If required polyurethane and epoxy-vinyl enamels may be applied as the top coat.

Use of other primers and enamels with the fire-proof composition PLAMCOR-5 shall be agreed upon with the manufacture of the fire-proof material.

Fire rating of the coating in the conditions of hydrocarbon burning with the reduced metal thickness of 5.8 mm and coating thickness of 14.6 mm is 132 minutes.

Certificate, Approvals

State registration certificate No. RU.66.01.40.008.E.000191.10.18 dd. 05.10.2018.

Compliance certificates No.CCP1-RU.4C.13.H.00230 dd. 20.02.2016, No. C-RU.ПБ.34.В. 01934 dd. 21.06.2016 (mandatory certification).

Technical Data

	Coating
Appearance and color	Grey, without cracks and pores
Dry film thickness per coat (typical):	
- airless spray	3 - 4 mm
- trowel	3 mm, not less
Adhesion acc. to ASTM D 3359	grade 4 A, not less
Intumescent coefficient	10 times, not less
	Composition
Density, g/cm ³	1.22 -1.27
Pot life at (20±2)°C	1 hour, not less
Theoretical spreading rate for one-layer coat of thickness 1000 μ	1.3 kg/m ²
Drying time to 3 degree (GOST 19007-73) at a temperature of (20±2) °C and relative air humidity (65±5) %	12 hours , not more

Surface Preparation

Priming of metal surface with one or two layers of total thickness from 40 to 80 μm is required.

Dust, dirt and moisture shall be removed from the primer coating. The primer coating shall be degreased. There shall be no defects in the form of flaking or peeling, corrosion or cracking. All damaged areas shall be repaired.

The hold time of the primer coating at a temperature (20±2)°C after its application and before placing PLAMCOR-5 shall be not less than 24 hours.

Instruction for use

For professional use only!

Preparation of the composition:

- Mix the composition until smooth using mixer;
- While mixing constantly add hardener (base/ hardener ratio by mass 100:20.9). After mixing the composition is ready for use. The working life of the composition after mixing is 1 hour (at a temperature (20±2) °C, if the temperature is higher the working life reduces.

- If required use thinner to reach working consistency directly prior to application.

Airless spraying

Recommended thinner	SOLV-UR (TU2319-032-12288779-2002), solvent
Quantity	up to 5 % by mass
Nozzle diameter	not less than 0.047" (1.19 mm)
Pressure	not less than 25 MPa (250 bar)

Trowel

Recommended thinner	SOLV-UR, solvent
Quantity	up to 5 % by mass

Equipment cleaning

SOLV-UR, solvent

Application conditions: at temperatures from minus 5 to plus 40 °C and relative air humidity not exceeding 80%.

The composition shall be applied by airless spraying or spatula in 1-5 layers depending on the required fire-retardant efficiency and quoted metal thickness.

The process provides for natural drying. The drying time depends on the temperature, if the temperature increases the drying time reduces.

Each subsequent layer of the composition shall be applied only on expiration of 4 hours after application of the previous layer (at a temperature (20±2) °C); the next layer may be applied when the previous layer is sticky to touch. At reduced temperatures the time of drying shall be increased.

The coating shall be supported by the reinforcing mesh being the carbon fiber composite.

The full drying time of PLAMCOR-5 at a temperature (20±2) °C is not less than 7 days (depending on the temperature, when the temperature increases the drying time reduces).

If required the finishing enamel may applied on the fire-proof coating in one or two layers of total thickness 50-80 µm. The minimum hold time of PLAMCOR-5 prior to application of finishing enamels is not less than 24 hours, maximum time- not more than one month.

The fire-proof coating when damaged in operation shall be repaired, in this the damaged coating is removed and renewal up to the required thickness is performed.

Packing and Storage

The composition PLAMCOR-5 is delivered packed (base and hardener) in metal buckets, the reinforcing mesh is additionally supplied.

Storage conditions shall comply with GOST 9980.5 (ambient air temperature from minus 40 to plus 40 °C, away from the heat sources). The packaging containing the composition shall not be affected by direct sunlight and atmospheric condensation.

The shelf life of the composition in the sealed packaging of the manufacturer shall be 12 months from the production date.

Safety Measures

When working with the composition one shall observe the existing sectoral standard norms and requirements and safety measures as specified on the package label.

One shall use personal protective equipment (goggles, face masks and respirators) and avoid inhalation of solvents and contact of the composition substances with skin, eye mucosa, respiratory channels; use inside the premises is allowed only in case sufficient ventilation is provided.

The composition is classified as a fire-hazardous material.

The information is of general character, without consideration to the object specific nature. Use of materials for other purposes not specified here or in case other influencing factors are present shall be approved by the VMP Holding CJSC in writing. In case of absence of such approval the manufacturer is not held liable for the improper use of the material and the buyer falls from the right to present claims connected with the coating quality.



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