

# PLAMCOR®-3

intumescent fireproof composition  
TU 20.30.22-087-12288779-2021



Quality management system  
is certified according to ISO 9001

## Description

Two-package epoxy-based composition with aliphatic polyamine hardener. It is characterized by high content of nonvolatile matter, for thick coats with high fire-proof performance.

The coating is weather resistant; in case of intensive UV radiation it is recommended to cover with top enamel.

It may be applied at ambient air temperatures of up to minus 5 °C.

## Recommended use

Fire protection of metal structures exposed to the moderate, moderately cold and cold weather, all atmosphere types and location categories according to GOST 15150 including open-air industrial atmosphere.

It is used as top coat or undercoat in the integrated protective coating systems intended for protection of metal structures from corrosion and fire. It is applied onto the primer coatings ZINOTAN, ZINEP, ISOLEP-primer, ZFES, EVOPOL-12, GF-021, Penguard Express or other primer coatings on the agreement with the manufacturer.

As topcoats may be used POLYTON-UR (UV), VINICOR-62 or another polyurethane, epoxy-vinyl or other enamels on the agreement with the manufacturer.

The fire resistance of the loss of bearing capacity in the case of cellulose burning:

- with reduced metal thickness of 3.4 mm and coat thickness of 2.2 mm – 45 minutes;
- with reduced metal thickness of 3.4 mm and coat thickness of 3.3 mm – 60 minutes
- with reduced metal thickness of 5.8 mm and coat thickness of 4.1 mm – 90 minutes.
- with reduced metal thickness of 7.2 mm and coat thickness of 7.3 mm – 120 minutes

## Certification

State registration certificate RU.66.01.40.015.E.000356.12.12 dated 12.12.2012;

Conformity certificates № C-RU.ПБ34.B.01107 dated 01.03.2013, № C-RU.ПБ34.B.01743 dated 03.06.2015, № C-RU.ПБ34.B.01763 dated 09.07.2015 (mandatory certification).

Expert Report by the Research Institute for paint materials with pilot plant "Victoria", Khotykovo, Moscow State Construction University (seismic resistance).

Conformity certificate CVC Intergazsert № OGN4.RU.1304.B00040

## Technical data

Appearance	Homogeneous without pores and cracking
Color	Grey, the hue is not standardized
Density	1.24-1.30 g/ml
Pot life at (20±2)°C, hours	1.5, not less
Non-volatile matter content, %, - by mass	89±1
- by volume	85±3
Dry film thickness per coat: - airless spray	800-1000 µm (0.8-1.0 mm)
- brush/roller	500 µm (0.5 mm) not less
Wet film thickness per coat: - airless spray	900-1125 µm (0.9-1.125 mm)
- brush/roller	560 µm (0.56 mm) not less
Theoretical spreading rate for one-layer coat of thickness 800-1000 µm	1.1-1.4 kg/m <sup>2</sup>
Drying time to 3 degree (GOST 19007) at a temperature of (20±2)°C and relative air humidity (65±5)%	10 h, not more
Intumescent coefficient	10 times, not less

## Surface Preparation

The primer coating shall be cleaned from dirt, dust and decreased, shall be free from moisture and shall not have any corrosive degradation, flaking and cracking.

All damaged segments shall be resurfaced.

Thickness of the primer coating shall be from 40 to 80  $\mu\text{m}$ . Holding time (at  $20\pm 2^\circ\text{C}$ ) prior to application of PLAMCOR-3 shall be not less than 24 hours.

## Application

Preparation for use:

- mix thoroughly until homogeneous using mixer;
- when mixing add the hardener (mixing ratio 100:12 by weight), after mixing the composition is ready for use;
- if required prior to application dilute with thinner until working consistency.

The composition shall be applied at temperature from minus 5 to plus 40  $^\circ\text{C}$  and relative air humidity of up to 80 %.

Recommended application:

### **Airless spray**

Recommended thinner	SOLV-UR (TU 2319-032-12288779-2002) solvent
Quantity of thinner	up to 5 % by mass
Nozzle diameter	0.031"-0.047" (0.79-1.19 mm)
Pressure	not less than 25 MPa (250 b)

### **Brush**

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

### **Equipment cleansing**

SOLV-UR, solvent

The composition shall be applied in 1-5 layers depending on the fire rating requirements and reduced metal thickness.

Natural atmospheric drying. The coat is maintainable.

Each subsequent layer shall be applied on expiration of 12 hours after application of the previous layer at temperature from  $(20\pm 2)^\circ\text{C}$ , at low temperatures holding time shall be increased.

Minimum holding time of the coat PLAMCOR-3 before application of the top enamel is not less than 24 hours, maximum holding time- not more than 1 month.

The time of complete drying of PLAMCOR-3 at temperatures  $(20\pm 2)^\circ\text{C}$  is not less than 7 days (depending on the temperature).

## Storage and handling

PLAMCOR-3 composition is two-package: basis and hardener packing in metal buckets.

Storage and transportation are carried out in accordance with GOST 9980.5 (in closed premises, ambient temperature from minus 35 to plus 35  $^\circ\text{C}$ ). The composition shall be stored far away from the heat sources. During storage avoid direct sunlight and precipitation.

Warranty storage period in air-tight original manufacturer's containers is 12 months from the date of manufacture.

## Precautions

When working with the composition one shall observe the respective industry-specific regulations and norms and protective measures on the package label.

One shall use individual protective equipment (goggles, face shields, respirators); avoid breathing of the solvent vapor and contact of the composition with skin, mucosa of the eyes and respiratory tract. In case of indoor use sufficient ventilation is required.

The composition is classified as 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.*



### **VMP RESEARCH & PRODUCTION HOLDING CJSC**

**Ekaterinburg** +7 (343) 357-30-97; 385-79-00; 385-66-10, office@fmp.ru

**Moscow** +7 (495) 411-65-03; 411-65-04, msk@fmp.ru

**Saint Petersburg** +7 (812) 640-55-20; 676-20-20, spb@fmp.ru

For VMP representation offices in Russia and abroad – **vmp-holding.ru**