

PLAMCOR[®]-2

intumescent fireproof composition
(TU 2313-074-12288779-2008)



Description

Intumescent solvent-borne acrylic composition for fire protection.
Application at temperatures up to minus 25 °C is possible.

Recommended use

Fire protection of structural steel of industrial and civil engineering in atmospheric conditions of the moderately cold and cold climatic regions, I и II types of atmosphere; 2, 3 and 4 categories of location according to GOST 15150 at the relative humidity not more than 80 %. It is not water resistant.

PLAMCOR-2 is applied as an intermediate or finish layer in PLAMCOR coating systems for corrosion and fire protection of structural steel. It is recommended to use with ZINEP, ISOLEP-primer, ISOLEP-mastic, VINICOR-061, VINICOR-ecoprime-01 and GF-021 (ГФ-021).

As topcoats may be used POLYTON-UR, POLYTON-UR (UV), POLYTON-HV and PF-115 (ПФ-115).

Use of other paint products in the protective coating systems is allowed only if approved by the VMP Holding.

The fire resistance of the loss of bearing capacity:

- with reduced metal thickness 3.4 mm and the thickness of coating 0.8 mm – 45 minutes;
- with reduced metal thickness 3.4 mm and the thickness of coating 1.25 mm – 60 minutes;
- with reduced metal thickness 5.8 mm and the thickness of coating 1.5 mm – 90 minutes;
- with reduced metal thickness 7.2 mm and the thickness of coating 2.1 mm – 120 minutes.

Certification

State registration certificate № RU.66.01.40.015.E.000016.02.14 dated 07.02.2014.

Conformity certificates № C-RU.ПБ34.B.02386 dated 06.08.2018, C-RU.ПБ34.B.02206 dated 11.12.2017, № C-RU.ПБ34.B.01944 dated 12.07.2016, № C-RU.ПБ34.B.01871 dated 24.02.2016.

Technical data

	Coat
Appearance	homogeneous, without pores and cracks
Color	white, the hue is not standardized.
Dry film thickness per coat	
- airless spray	400-800 µm (0.4-0.8 mm)
- brush/roller	200-350 µm (0.2-0.35 mm)
Intumescent coefficient	10 times, not less

	Composition
Appearance after mixing	white homogeneous suspension
Density	1.30-1.45 g/ml
Non-volatile matter content, % by mass	73.0-77.0 %
Theoretical spreading rate for one-layer coat of thickness 400-800 µm	600-1200 g/m ²
Drying time to 3 degree (GOST 19007) at a temperature of (20±2)°C and relative air humidity (65±5)%	3 hours, not more

Surface preparation

The primer coating should be cleaned from dust, dirt, moisture, degreased and don't have any defects such corrosion of metal, flaking, cracking.

All areas of damage of primer coating should be repaired.

Application

The composition of PLAMCOR-2 should be coat to the primer (ZINEP, ISOLEP-primer, ISOLEP-mastic, VINICOR-061, VINICOR-ecoprime-01) not earlier than 24 hours, on GF-021 (ГФ-021) coating – not earlier than 7 days after its application at temperature (20±2)°C (otherwise sagging or cracking of PLAMCOR-2 may occur).

PLAMCOR-2 may be applied at the temperature from minus 25 °C to plus 40 °C and up to 80 % RH (if temperature is lower contact VMP for advice).

The coating is not waterproof. When it is applied and exploit avoid influence of moisture, condensate and other source of water.

Preparation for use:

- mix up thoroughly to homogeneous state with mixer;
- add recommended thinner to achieve workable consistency if it is necessary before the application.

Airless spray

Recommended thinner	SOLV-UR (TU 2319-032-12288779) solvent, xylene
Quantity	up to 5 by mass %
Nozzle size	0.019"-0.031" (0.48-0.79 mm)
Pressure	not less than 21 MPa (210 b)

Brush

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

Equipment cleansing

SOLV-UR
solvent, butyl acetate

PLAMCOR-2 should be applied in 2-5 coats depending on required group of the fire retardant efficiency of the coating, reduced metal thickness and the coating method.

The first dry film thickness must not be more than 200 microns (400 microns wet film thickness). Each subsequent coat should be applied at the standard recommended dry film thickness of 400 to 800 µm (when applied by airless spray) with a wet film thickness of 800 to 1500 µm. If the recommended thickness of one layer is significantly exceeded, defects in the form of cracks or craters may appear on the dry coating. When applied with a brush, the layer thickness will be lower and more coats will be required.

It is allowed to locally exceed the total thickness up to 3 mm in structurally difficult places for painting in the absence of drips, cracking and deterioration of the adhesion of the coating to the primer.

Drying of the coating is natural, the coating is repairable.

The drying time of a single-layer coating PLAMKOR-2 with a wet layer thickness of 1.0 mm is given in the table:

Drying rate of the coating	Drying time of the coating, h at air temperature, ° C				
	-10	0	+10	+20	+30
To tack free	8	4	2	1	0.5
Min overcoating interval by itself	72	36	12	6	4
Drying time increases with increasing coating thickness					

The overlapping interval by top coats is 24 hours, not less (at temperature at (20±2)°C). If temperature is lower recoating interval should be increased.

The through dry time at (20±2)°C is 10 days, not less. (if temperature is higher time decrease).

Coating service life

PLAMKOR-2 coating with a primer and topcoat has a service life:

- at least 25 years when operated in premises of location category 3 and 4 in accordance with GOST 15150;
- at least 10 years when operated in an atmosphere of moderately cold and cold climates, placement category 2 in accordance with GOST 15150.

The coating retains its fire retardant efficiency for the specified period in the absence of mechanical damage and constant moisture condensation. After the end of the specified period, the fire retardant coating must be replaced with the complete removal of the existing layer and its subsequent restoration.

Storage and handling

The composition is packed in tin cans or jars.

Store in dry, shaded conditions away from sources of heat, moisture and ignition, at the temperature from minus 40 to plus 40 °C; GOST 9980.5-2009. The composition must be stored in a hermetically sealed container of the manufacturer away from heat sources. Packaging with the composition should not be exposed to atmospheric precipitation and direct sunlight.

Guaranteed shelf life in the manufacturer's package units is 24 months from the date of packaging.

Precautions

When working with the enamel 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 substances with skin, eye mucosa, respiratory channels; use inside the premises is allowed only if 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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