

ZINEP® 80

anticorrosive zinc-rich primer
(TS 20.30.12-022-12288779-2018)



Description

ZINEP 80 is a two-component zinc-rich polyamide cured epoxy primer with high content of non-volatile matter. According to the metal zinc mass content (not less than 80 %) the coating meets the operational requirements SSPC Paint 20 (level 2, type II), can be considered as "cold" galvanizing.

Recommended use

Anticorrosive protection of steel structures operating under atmospheric conditions of all macroclimatic regions, atmosphere types and location categories as per GOST 15150. The coating is resistant to sea and fresh water, aqueous solutions of salts, to oil and oil products.

Recommended for use:

- with ISOLEP-mio, POLYTON-UR (UV), POLYTON-UR, ALUMOTAN, as well as with other epoxy, polyurethane, vinyl chloride and copolymer-vinyl chloride coatings;
- in complex fire-proof systems with the of the PLAMCOR® series

Certificates, approvals

Certificate of state registration No. RU.66.01.40.015.E.000120.10.19 dated 04.10.2019.
Lacquer Coating Research Institute, Khotkovo town.

Technical data

Appearance and color of coating	Gray, the shade is not standardized matte
Cross cut adhesion (GOST 31149), not more than	0 grades
Heat resistance in dry atmosphere	120 °C
Density, g/cm ³	2.45 – 2.65
Pot life at temperature (20±2) °C, h	12, not less than
Non-volatile matters	
by volume, % volume	61
by mass, % mass	83 – 86
Viscosity	Thixotropic
Dry film thickness, µm	40 – 80
Wet film thickness, µm	70 – 140
Drying time to 3 degree (GOST 19007) at +20 °C, h	2
Theoretical spreading rate of one-layer coating, g/m ²	170 – 340

Surface preparation

- degrease metal surface to 1 grade according to GOST 9.402;
 - do abrasive blast cleaning of scale, rust and traces of old paint to not less than 2 grade according to GOST 9.402 or Sa 2 1/2 according to ISO 8501-1 with a roughening of 30-50 µm (segment 2 of G comparator according to ISO 8503-2). Application on a smooth surface is not allowed;
 - remove dust.
- The primer should be applied no later than 6 hours after abrasive blasting.
In case of storing the primer at a lower temperature, it is necessary to hold the material for 24 hours at temperature from plus 15 to plus 25 °C.
Before the application of subsequent layers, the coated surface must be clean from dirt, degreased, dust-free and dry.

Application

- mix the primer base to a homogeneous condition before application;
- add hardener to the primer base with constant stirring, mix thoroughly during 2-3 minutes to a homogeneous condition. The proportion of base and hardener: by mass 100:5.5, by volume 6:1;
- hold for at least 30 minutes before application and mix again to a homogeneous condition;
- dilute to working viscosity, if necessary, immediately before application.

For the organization of painting work, the decrease of the pot life with increasing temperature should be taken into account. The dependence is given in the table:

Parameter name	Ambient temperature			
	10 °C	20 °C	30 °C	40 °C
Pot life of the primer, hours	24	12	6	4

It is recommended to apply the ZINEP 80 at temperature from 0 to plus 40 °C (allowed at temperature from minus 5 °C) and relative humidity of not more than 85 %. The temperature of the surface to be painted must be above the dew point by at least 3 °C, but not above plus 40 °C. When painting, the temperature of the material should not be below plus 15 °C.

Apply 1-2 layers by airless, pneumatic (air) spray, brush/roller (striped painting).

The recommended parameters:

Airless spray

Recommended thinner SOLV-EP (TS 20.30.22-106-12288779-2018),
thinners 646, 647, 648
Quantity up to 5 % by mass
Nozzle diameter 0.015" - 0.021" (0.38 - 0.53 mm)
Pressure 15 - 25 MPa (150 - 250 bar)

Conventional (air) spray

Recommended thinner SOLV-EP,
thinners 646, 647, 648
Quantity up to 5 % by mass
Nozzle diameter 1.8 - 2.2 mm
Pressure 0.3 - 0.4 MPa (3 - 4 bar)

Brush / roller

Recommended thinner SOLV-EP, thinners 646, 647, 648
Quantity up to 5 % by mass

Equipment cleaning

SOLV-EP, thinners 646, 647, 648

The minimum time to overlapping by each subsequent layer corresponds to 3 degree, and is given in the table:

Drying degree	Time, minutes (minutes), h (hours) at ambient temperature, °C						
	-5	0	+10	+20	+25	+30	+40
to overlapping	36 h	24 h	12 h	4 h	3 h	2.5 h	1.5 h
to turning over, handling	6 d	3 d	24 h	11 h	8 h	6 h	1.5 h
to stackable	10 d	5 d	48 h	14 h	10 h	8 h	3 h

The hardening time is recommended as an approximate for practical painting. Hardening time depends on the surface temperature and ambient air, the dilution ratio of the material, the coating thickness, the efficiency of ventilation and the relative air humidity.

The drying time "to turning over, handling", "to stackable" depends also on the design features of the metal structures (the number of support points, sling arrangements, metal structures fasteners for further transportation) and may differ from those indicated. It should be determined by test coloring for specific conditions.

The maximum holding time before coating application is not more than 1 year. The holding time of the coating at a temperature of 20 °C before the operation in severe environments is not less than 7 days.

Storage and handling

ZINEP 80 is supplied as the Base in 10 and 1 litre metal containers and the curing agent in 3 and 0.25 litre metal containers.

Storage conditions – according to GOST 9980.5 (at air temperature from minus 40 to plus 40 °C). The material components shall be stored away from heat sources, the container shall be protected from direct sunlight (short-term impact, not more than 3 hours, is acceptable) and atmospheric condensation.

The shelf life of the components is 18 months starting with the date of manufacture.

Precautions

When working with the enamel-primer 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.

It is classified as fire-hazardous material.

The information is of general character, without consideration to the object specific nature and it is recommended to be read with the Operating Procedure. 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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