

anticorrosive zinc-rich composition (TS 2313-012-12288779-99)



Description

Single-packed zinc-rich composition based on a high molecular weight synthetic polymer.

According to the metal zinc mass content (more than 85 %), the coating meets the operational requirements SSPC Paint 20 (level 1, type II), can be considered as "cold" galvanizing.

Recommended use

Anticorrosive protection of steel articles and structures operated in the atmospheric conditions of all macroclimate areas, types of atmosphere and placement categories according to GOST 15150. The coating is resistant to sea and fresh water, in aqueous solutions of salts (pH = 6.0-9.0). The coating is not resistant to gasoline and a number of organic thinners.

The ZINOL composition is used as:

- primer under coating materials in complex protection systems;
- independent coating;
- repair composition of zinc metal coatings.

It is recommended to use aluminum-rich composition ALPOL (TS 2313-014-12288779-99), vinylepoxy and alkyd top coats; others – as agreed with VMP.

Certificates, approvals

Certificate of state registration No. RU.66.01.40.015.E.000076.02.12 dated 28.02.2012

Construction: recommended for use according to GOST 9.401, Moscow City Construction Regulations 2.081-01 and Moscow City Construction Regulations 2.09-03 (TI 12288779.25173.00020), RD FM 02-18 Trest Gidromontazh;

Power engineering: certification of Interdepartmental Commission of FGC UES (TI 12288779.25073.00045), Register of NK Rosneft.

Transport construction: Technical instruction No. K-05/06 of RZD Holding dated 14.07.2006; TS 5264-853-01393674-07 "Foundations on screw piles for contact system mast".

Approved by testing centers: Lacquer Coating Research Institute, Khotkovo town; Central Scientific Research Institute of Construction; Melnikov Central Research and Design Institute of Steel Structures, Research and Development Center of Automotive Tests; Concrete and Reinforced Concrete Research Institute of Moscow, Institute of Ecology and Evolution Problems RAS named after A.N. Severtsov (Russian-Vietnamese Research and Technology Center, Nyachang).

Technical data

Coating	
Color and gloss	light-gray (the shade is not standardized), matte
Zinc mass content in dry coating, %	96
Dry film thickness, µm	40 - 60
Adhesion according to GOST 15140	1 grade, not more than
according to GOST 31149	0 grade, not more than
Heat stability in dry atmosphere	120 °C, not more than
Composition	
Density, g/cm ³	2.6 ± 0.1
Assumed viscosity according to viscometer with	
a nozzle diameter of 4 mm at temperature (20+2)°C, s	30-130
Solids by mass, %	79.0±1
Solids by volume, %	44.0±2
Theoretical spreading rate, g/m ²	235 - 350
Drying time to 3 degree (GOST 19007) at (20±2)°C, h	0.5, not more than

Surface preparation

- to degrease metal surface to 1 grade according to GOST 9.402;
- to do abrasive blast cleaning to 2 degree according to GOST 9.402 (Sa 2 $\frac{1}{2}$ ISO 8501-1) with roughening recommended surface profile is Rz = 30-50 μ m. Power and hand tool cleaning of surface to 3 grade according to GOST 9.402 (St 3 or St 2 ISO 8501-1) for hot-rolled steel is allowed.

Application on a smooth surface without roughening is not allowed;

• to remove dust.

Preparing the ZINOL coating before overcoating:

- degrease (if necessary) with aqueous solutions of detergents (pH of solutions should be in the range of 6 to 8), slight degreasing (without grinding) using white spirit is allowed;
 - remove moisture and dust.

Application

- mix thoroughly to homogenous condition before application;
- if necessary, the composition should be diluted to the working viscosity immediately before application.

Apply at temperature from minus 25 to plus 40 °C and a relative air humidity of up to 85 %.

When applying multi-layer coatings, each subsequent layer should be applied after the previous one has dried to "tack" (light pressure on the coating with a finger leaves no trace and does not give a sticky sensation).

The minimum overcoating interval by ALPOL composition is 2 hours, by other coatings - 24 hours; the maximum time is not limited.

Drying is natural. Time of complete hardening of the coating and holding time before the start of operation in aggressive, incl. liquid, environments is not less than 7 days (at temperature of (20 ± 2) °C), before the start of packaging and transportation of structures – 24 hours.

Recommended Application Parameters

Airless spray

Recommended thinner SOLV-UR (TS 2319-032-12288779-2002)

or solvent

Quantity up to 5 % by mass

Nozzle diameter 0.015" - 0.021" (0.38 - 0.53 mm) Pressure 10 - 20 MPa (100 - 200 bar)

Conventional (air) spray

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

Equipment cleaning SOLV-UR, solvent or thinners 646, 647,649

Storage and handling

ZINOL is supplied in metal containers.

Storage and transportation conditions – according to GOST 9980.5 (at temperature from minus 40 to plus 40 $^{\circ}$ C). The container shall be protected from atmospheric condensation and direct sunlight; a short-term storage under direct sunlight, not more than 3 hours, is allowed. In case of storage at freezing temperatures before application, the composition must be kept in warm for a day.

The shelf life in hermetically enclosed original container is 12 months starting with the manufacture date.

Precautions

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

Personal protective equipment (goggles, face masks and respirators) shall be used, inhalation of thinners and contact of the composition or its components with skin, ocular mucosa, respiratory channels shall be avoided; use inside the premises is allowed only in case sufficient ventilation is provided.

The composition is classified as a fire-hazardous material, the ZINOL coating is fire-proof, refers to materials that do not spread the flame over the surface.

The coating is non-toxic and can be used inside office and residential premises.

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; 385-66-10, office@fmp.ru **Moscow** +7 (495) 411-65-03; 411-65-04, msk@fmp.ru **St. Petersburg** +7 (812) 640-55-20, spb@fmp.ru

For representation offices of the "VMP" in Russia and abroad: vmp-holding.com