

## Description

Single-packed zinc-rich polyurethane composition with a high content of non-volatile matter. The coating hardens by air moisture.

According to the metal zinc mass content, the coating meets the level 1, type II of SSPC Paint 20.

## Recommended use

Anticorrosive protection of steel structures operated in the atmospheric conditions of all macroclimate areas, types of atmosphere and placement categories according to GOST 15150, in fresh and sea water, in aqueous solutions of salts, in oil and oil products.

The composition is used as:

- primer under coating materials in complex protection systems;
- independent coating.

Recommended for use as a primer:

- in complex systems of anticorrosive protection with POLITON-UR enamel (TU 2312-029-1288779-2002), FERROTAN (20.30.12-036-1288779-2018) and ALUMOTAN (TU 2312-018-12288779-99) compositions, as well as with other materials based on polyurethane, epoxy, and vinyl-epoxy;
- in complex fire-proof systems with fire-proof compositions of the PLAMCOR series.

## Certificates, approvals

Certificate of state registration No. RU.66.01.40.015.E.000010.01.11 dated 28.01.2011

Certificates of conformity (for fire-protective efficiency) No. C-RU.ПБ34.В.01107 dated 01.03.2013, No. C-RU.ПБ34.В.01824 dated 23.10.2015, № C-RU.ПБ34.В.01871 dated 24.02.2016, No. C-RU.ПБ34.В.01934 dated 21.06.2016.

Certificate of the Russian River Register No. 07574 dated 24.11.2016.

**Industrial and civil construction:** GOST 9.401 (amendment No. 2), GOST 31384, TI 12288779.25173.00020 (SUE Concrete and Reinforced Concrete Research Institute of Moscow).

**Transport construction:** STO-01393674-007-2015 Central Scientific Research Institute of Transport Construction JSC; STO-12288779-001-2013 SC Avtodor; Technological Regulations TP12288779.02073.00006 and TP 12288779.02073.00007 (Central Scientific Research Institute of Transport Construction); "Technological guidelines for the metal structures of railway bridges painting" (Russian Railways JSC); Typical technological regulations 12288779.02073.00058 on the coloring of railway bridges (Russian Railways JSC),

**Oil and Gas Industry:** Register of Gazprom JSC, Register and Technological Instruction of П2-05 C-028 P-002 T-001, NK Rosneft PJSC, STO 03-196-2006, ST-20-00-1.2- 01 ANC Bashneft PJSC.

Decisions: Lacquer Coating Research Institute, Khotkovo town; Melnikov Central Research and Design Institute of Steel Structures, Central Scientific Research Institute of Transport Construction, All-Union Pipeline Construction Scientific and Research Institute, Bashneft Research and Project Institute, Russian Research Institute for Natural Gases and Gas Technologies, Concrete and Reinforced Concrete Research Institute of Moscow, Scientific Research Institute of Energy Structures (RusHydro) Institute of Ecology and Evolution Problems RAS named after A.N. Severtsov (Russian-Vietnamese Research and Technology Center, Nyachang; SIC, Sochi; CIS, Severomorsk).

## Technical data

	Coating
Color and gloss of coating	Gray (the shade is not standardized) matte smooth coating
Dry film thickness, µm	60 - 100 recommended - 80
Adhesion (GOST 15140, method 2)	1 grade, not more than
Adhesion (GOST 31149)	0 grade, not more than
Heat resistance in dry non-aggressive atmosphere	120 °C, not more than

  

	Composition
Density, g/cm <sup>3</sup>	2.75 - 2.90
Non-volatile matter, %	86.0 - 89.0
Viscosity according to Brookfield at temperature (20±0.5)°C, mPa*s	1500, not less than
Hiding power, g/m <sup>2</sup>	175, not more than
Drying time to 3 degree (GOST 19007) at temperature (20±2)°C and relative humidity (65±5)%, h	2, not more than
Theoretical spreading rate (to 80 µm), g/m <sup>2</sup>	370

## Surface preparation

- to degrease metal surface to 1 grade according to GOST 9.402;
- to do abrasive blast cleaning to 2 grade according to GOST 9.402 (Sa 2 ½ or Sa 2 ISO 8501-1) with roughening, recommended surface profile is Rz = 30-50 µm. For hot-rolled steel, power and hand tool cleaning up to 3 grade according to GOST 9.402 (St 3 or St 2 according to ISO 8501-1) is allowed.  
Application on a smooth surface without roughening is not allowed;
- to remove dust.

## Application

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

It is recommended to apply the composition in 1-2 layers by airless, conventional (air) spray, roller, brush in the conditions of plant, construction site, at temperatures from minus 15 to plus 40 °C and relative air humidity from 30 to 98 %.

### **Airless spray**

Recommended thinner	SOLV-UR (TU 2319-032-12288779-2002), petroleum naphtha
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-UR, petroleum naphtha
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-UR, petroleum naphtha
Quantity	up to 5% by mass

### **Equipment cleaning**

SOLV-UR solvents,  
petroleum naphtha P-4, 647 are used.

When applying multi-layer coatings, each subsequent layer should be applied no earlier than after the previous layer has dried up "to tack free" (slight touch on the coating does not leave a trace and does not give a feeling of stickiness). Avoid prolonged air contact of the composition in open containers.

The minimum overlapping interval of the ZINOTAN coating prior to the application of coating layers of the FERROTAN, ALUMOTAN compositions, POLITON-UR enamel at temperature of (20±2)°C and relative air humidity (65±5)% is not less than 4 hours; maximum – no more than 2 years (with a coating thickness 80 µm).

Drying of the coating is natural. When the humidity of the air decreases, the drying time of the coating increases. If the relative air humidity is less than 30 %, in order to shorten the drying time (by 2-4 times), it is recommended to use a drying agent composition for polyurethane paint materials (TU 2359-047-12288779-2005) in agreeing with representatives of the VMP Holding CJSC.

The holding time of the coating before the start of operation in severe atmosphere is 7 days.

## Storage and handling

The composition is delivered in metal buckets and cans.

Storage and transportation conditions of composition – according to GOST 9980.5 (at temperature from minus 40 to plus 40 °C). The container with composition shall be protected from atmospheric condensation and direct sunlight.

The shelf life of the composition in hermetically enclosed original container is 12 months starting with the manufacture date (at temperature plus 23 °C).

## 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 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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