

Description

Single-packed composition is a suspension of aluminum powder and functional additives in polyurethane lacquer and a mixture of organic thinners, the composition hardens by air moisture.

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 1515-69, in fresh and sea water, in aqueous solutions of salts, acids and alkalies, in oil and oil products.

The composition is used as:

- topcoat for ZINOTAN coatings (TU 2312-017-12288779-2003), ZINEP (TU 20.30.12-022-12288779-2018) and ZFES (TU 20.30.12-004-12288779-2017) for increasing the protective and decorative properties;
- independent decorative coating for metal surfaces, operated in atmospheric conditions.

Certificates, approvals

Certificate of state registration No. RU.66.01.40.015.E.000011.01.11 dated 28.01.2011

GOST 9.401 (amendment No. 2)

STO-01393674-007-2011 JSC CNIIS, RD ГМ-01-02 Trest Gidromontazh, STO 03-196-2006 ANK Bashneft, Technological Instructions of Russian Railways (CPI 6/1) for the painting of the operated railway bridges.

Approved by Research Institute of Coating Industry with Experimental Mechanical Plant "Victoria", Central Scientific Research Institute of Construction, All-Russian Scientific Research Institute of Railway Transport, Institute of Energy Resources Transportation Problems, BashNIPIneft, Institute of Ecology and Evolution Problems RAS named after A.N. Severtsov (SIC, Sochi).

Technical data

	Coating
Color and gloss	silvery-gray with shine
Dry film thickness, μm	50-70
Impact strength, cm	50, not less than
Elasticity when folding, mm	2, not more than
Adhesion	1 grade, not more than
Heat resistance in air	150 °C
Coating class	IV
	Composition
Density, g/cm^3	0.98 - 1.10
Non-volatile matter content, %	50.0 - 53.0
Theoretical spreading rate, g/m^2	115 - 160
Drying time to degree 3 according to GOST 19007-73 at temperature $(20\pm 2)^\circ\text{C}$ and relative humidity $(65\pm 5)\%$, hours	3, not more than

Surface preparation

Before applying the composition ALUMOTAN, the primer must first be cleaned of dirt, degreased and dust-free.

When using the ALUMOTAN composition as an independent coating it is necessary:

- to degrease the metal surface to the first grade according to GOST 9.402-2004;
- to clean from scale, rust and traces of old paint to 2 grade according to GOST 9.402-2004 (Sa 2 ½ or Sa 2 according to ISO 8501-1:2007). Power tool cleaning according to GOST 9.402-2004 to 3 grade (St 2 or St 3 according to ISO 8501-1:2007) is allowed;
- to remove dust from the surface.

Application

- mix the composition thoroughly to homogenous condition before application;
- strain the composition through a grid with a mesh of 0.5 mm (500 µm);
- if necessary, dilute to working viscosity before application;
- in case of pause, limit contact with air (cover the bucket with the composition: put down the lid).

Apply in factory and field conditions at temperatures from minus 15 °C to plus 40 °C and relative humidity from 30 % to 98 %.

When the relative humidity of the ambient air rises, the drying time of the coating shortens. In factory conditions, with relative humidity less than 30 %, to shorten (in 1.5 - 2.5 times) the drying time, it is recommended to use a drying agent composition for polyurethane paint materials (TU 2359-047-12288779-2005).

The holding time of the primer before application of the ALUMOTAN composition at temperature of (20±2) °C and relative air humidity (65±5) %:

- ZINOTAN coating – not less than 4 hours;
- ZFES coating – not less than 6 hours;
- ZINEP coating – not less than 4 hours.

When applying several layers of ALUMOTAN coating, each subsequent layer should be applied after the previous one has dried to "tack" (slight touch on the coating does not leave a trace and does not give a feeling of stickiness).

Drying of the coating is natural.

Airless spray

Recommended thinner	without
Nozzle diameter	0.015" - 0.019" (0.38 - 0.48 mm)
Pressure	10 - 15 MPa (100 - 150 bar)

Conventional (air) spray

Recommended thinner	SOLV-UR (TU 2319-032-12288779-2002), a mixture of butyl acetate and white spirit in a volume ratio of 1:1 up to 5 % by mass
Quantity	up to 5 % by mass
Nozzle diameter	1.8 - 2.2 mm
Pressure	0.2 - 0.4 MPa (2 - 4 bar)

Brush/roller

Recommended thinner	SOLV-UR, a mixture of butyl acetate and white spirit in a volume ratio of 1:1 up to 5 % by mass
Quantity	up to 5 % by mass

Equipment cleaning

SOLV-UR,
Thinner's types 646, 647, 649.

Storage and handling

The ALUMOTAN composition is delivered in packages: in metal buckets or metal cans.

Storage and transportation conditions of composition – according to GOST 9980.5-2009 (at air temperature from minus 40 °C to plus 40 °C). The container with composition shall be protected from atmospheric condensation and direct sunlight.

Shelf life of the in hermetically enclosed original container is 6 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 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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