

heat resistant composition (TS 2312-020-12288779-2001)



### Description

Single-packed composition based on organic-silicon heatproof lacquer and aluminum powder.

#### **Recommended use**

Anticorrosive protection of steel articles and structures operated long time at temperatures up to 350 °C (for a short time up to 400 °C) in the atmospheric conditions of all macroclimate areas, types of atmosphere and placement categories according to GOST 15150.

It is used in complex coating systems as protective and decorative topcoat on the ZINOTERM coating (TS 20.30.12-016-12288779-2018) or as an independent coating.

#### Certificates, approvals

Certificate of state registration 66.01.40.015.E.000054.10.10 dated 11.10.2010. The Register of Oil Company Rosneft JSC.

## **Technical data**

	Coating	
	Color and gloss	silver, luster, smooth
	Dry film thickness of one layer, µm	15-30
	Adhesion (GOST 15140)	1 grade, not more than
	Impact strength	50 cm, not less than
	Flexibility	3 mm, not more than
	Coating class (GOST 9.032)	IV
	Heat resistance	350 °C
Composition		
	Density, g/cm <sup>3</sup>	1.0-1.1
	Viscosity according to viscometer with a nozzle	
	diameter of 4 mm at (20±2)°C, s	14-30
	Non-volatile matter content, %	39-44
	Theoretical spreading rate, g/m <sup>2</sup>	60-120
	Drying time to 3 degree (GOST 19007-73)	
	at temperature $(20\pm2)^{\circ}$ C and relative	
	humidity (65±5)%, min	30, not more than
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#### Surface preparation

The ZINOTERM primer should be dust-free and cleaned from dirt, degreased with water (do not use thinners!) using detergents with a solution pH of 6 to 8, and dried.

- While using the ALUMOTERM composition as an independent coating it is necessary:
- to degrease the metal surface to the 1 grade according to GOST 9.402;
- to clean the surface from scale, rust and traces of the old paint to grade 2 according to GOST 9.402 (Sa 2  $\frac{1}{2}$  or Sa 2 to ISO 8501-1);
  - to remove dust.

# Application

- Mix the composition thoroughly to homogenous condition before application;
- dilute to working viscosity before application with recommended thinner (not more than 18 s).

The composition should be applied in factory and field conditions at the temperature from minus 15 °C to plus 40 °C and relative humidity of air up to 85 %.

The composition ALUMOTERM should be applied in 1-2 layers with a total thickness of not more than 30 microns to the ZINOTERM coating after it drying to 3 degree according to GOST 19007 (but not earlier than 30 minutes).

Exceeding the specified coating thickness (30  $\mu\text{m})$  may cause a decrease in the heat stability.

The formation of the ALUMOTERM coating occurs in natural conditions, in order to obtain an optimal physical and mechanical characteristics and improved protective properties, the coating is necessary heat up to a temperature of 150 °C and hold for at least 3 hours.

When operating in severe gaseous atmosphere, a pretreatment hot cure of the coating is required.

Application methods:			
Airless spray			
Recommended thinner	thinner 646, xylene		
Quantity	up to 15 % by mass		
Nozzle diameter	0.011"-0.017" (0.28-0.43 mm)		
Pressure	10-15 MPa (100-150 bar)		
Conventional (air) spray			
Recommended thinner	thinner 646, xylene		
Quantity	up to 15 % by mass		
Nozzle diameter	1.8-2.2 mm		
Pressure	0.20-0.25 MPa (2-2.5 bar)		
Brush/roller			
Recommended thinner	thinner 646, xylene		
Quantity	up to 15 % by mass		
Equipment cleaning	thinner 646, xylene.		

# Storage and handling

The composition is delivered in packages: in metal containers.

Storage and transportation conditions of composition – according to GOST 9980.5. 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 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 CISC 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; 385-79-00; 385-66-10, office@fmp.ru Moscow +7 (495) 411-65-03; 411-65-04, msk@fmp.ru Saint Petersburg +7 (812) 640-55-20, spb@fmp.ru

For VMP representation offices in Russia and abroad - vmp-holding.ru