

Description

Double-packed epoxy enamel, consisting of a base and hardener (aliphatic polyamine resin); contains "iron" mica.

Recommended use

Anticorrosive protection of steel articles and structures operated in the atmospheric conditions of all macroclimatic areas, types of environment and placement categories according to GOST 15150.

Enamel is used in complex coating systems as:

- intermediate layer;
- topcoat in the absence of intensive exposure to solar radiance (not recommended to use as a finish coat under the conditions of open air, I placement category according to GOST 15150).

The coating on the basis of enamel withstands oil and oil products spills, solutions of salts, acids and alkalis; waterproof.

Enamel is recommended for application in coating systems with ZINEP (TU 20.30.12-022-12288779-2018), ISOLEP-primer (TU 2312-067-12288779-2008), ZFES (TU 20.30.12-004-12288779-2017) and with other epoxy or silicone primers.

As finishing coat it is recommended to use the POLYTON-UR (UV) (TU 20.30.12-033-1228879-2018) and POLYTON-UR (TU 2312-029-12288779-2002) and other enamels on polyurethane and epoxy bases.

Certificates, approvals

Certificate of state registration No. RU.66.01.40.015.E.000134.12.10 dated 03.12.2010.
Standard STO-01393674-007-2011 Central Research Institute of Transport Construction JSC,
standard STO-12288779-001-2013 of Avtodor State Company.
The decision of Lakokraspokrytiye NGO, Khotkovo

Technical data

	Coating
Appearance and color	Homogeneous semi-matte gray or mustard color (the shade is not standardized)
Thickness of one dry layer, μm	100-200
Adhesion (GOST 15140)	1 grade, not more than
Heat stability (in dry non-aggressive atmosphere)	120 °C
Coating class	V
	Enamel
Density g/cm^3	1.45-1.65
Viscosity	thixotropic
Non-volatile matter content, %	80.0-84.0
Theoretical spreading rate, g/m^2	210-420
Drying time to degree 3 at temperature $(20\pm 2)^\circ\text{C}$ (GOST 19007), h	3.0, not more than
Pot life after mixing at temperature $(20\pm 2)^\circ\text{C}$, h	1.5, not less than

Surface preparation

- the surface shall be pre-primed;
- degreasing (if required) to the 1 grade according to GOST 9.402;
- remove moisture, dust.

Application

- mix the enamel base to a homogeneous condition;
- add a hardener to the enamel base with constant stirring (base – hardener mixing ratio 5.2:1 by mass, 3:1 by volume), after mixing, the enamel is ready for application;
- dilute with the thinner to the working viscosity, if necessary.

The enamel should be applied at plant and field conditions at temperatures from minus 10 to plus 40 °C and relative air humidity not exceeding 85 %.

Recommended methods of application:

Airless spray

Recommended thinner SOLV-EP (TU 20.30.22-106-12288779-2018)
Quantity up to 10 % by mass
Nozzle diameter 0.015"-0.021" (0.38-0.53 mm)
Pressure 10-15 MPa (100-150 bar)

Conventioanal (air) spray

Recommended thinner SOLV-EP
Quantity up to 10 % by mass
Nozzle diameter 1.8-2.2 mm
Pressure 0.3-0.4 MPa (3-4 bar)

Brush / roller

Recommended thinner SOLV-EP
Quantity up to 10 % by mass

Equipment cleaning

SOLV-EP or thinners 646, P-4

The drying time of the enamel depends on the temperature – as it increases the drying time shortens. The holding time of the coating prior to packaging and shipment is not less than 12 hours; not less than 7 days before operation in severe atmosphere.

Overcoating intervals of complex coating with ISOLEP-mio enamel (at the temperature of (20±2)°C) are given in the table:

Coating of enamel ISOLEP-mio on primer coat		Coating of finishing enamels on coat ISOLEP-mio	
The primer layer	Minimum overlap interval before enamel application	The topcoat	Overlap intervals of ISOLEP-mio, min/max*
ZINEP	4 h	POLYTON-UR(UV)	4 hours/6 months
ISOLEP-primer	2 h	POLYTON-UR	4 hours/6 months
ZFES	6 h	Other enamels	24 hours/6 months
Other primers	24 h	-	-
ISOLEP-mio	3 h	-	-

* If the maximum time is exceeded and the structures are stored for a long time under the influence of sunlight, additional measures are necessary to improve the adhesion of the layers of the coating enamels – treatment of the coating with ISOLEP-mio using detergent MS-01 (TU 2381-095-12288779-2013).

Storage and handling

The enamel is delivered in packages: base and hardener packed in metal buckets and metal cans respectively depending on the set weight.

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

Shelf life of the enamel components in hermetically enclosed original containers: base – 12 months and hardener – 18 months starting with the manufacture date.

Precautions

When working with the enamel, 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 enamel 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.



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; 676-20-20, spb@fmp.ru

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