

Description

ISOLEP-mastic is a double-packed product, based on modified epoxy resin and polyamine hardener. It is surface tolerant, high solids thick-layer coating produced in two colors: grey and silver-grey (with aluminum pigments).

Recommended use

Anticorrosion protection of metal structures operating under atmospheric conditions of all macroclimatic regions, types of atmosphere and location categories as per GOST 15150. The coating is resistant to spillage of oil, other petroleum products and chemical reagents. The primer-enamel of silver grey color may be recommended for anticorrosive protection of the outer surface of insulated heating piping with canal laying.

It is authorized for use in the agricultural buildings and constructions including those with humid disinfection and medium aggressive environment as a protection from corrosion of inner and outer metal structures.

It is used as:

- priming layer in the complete coating systems with finishing enamels POLYTON-UR (UV) (TU 20.30.12-033-12288779-2018), POLYTON-UR (TU 2312-029-12288779-2002), VINICOR-62 (TU 20.30.12-001-54359536-2018) and other materials based on epoxy, vinyl-epoxy and polyurethane.

- It can be also used on its own.

The primer-enamel is recommended for painting new metal structures or in case of renovation surfaces with tightly adhered rust of thickness not exceeding 50 µm or old coatings GF(ΓΦ)-021, FL(ΦЛ)-03K, VL(ВЛ)-023, other epoxy and polyurethane-based coatings.

Certificates, Approvals

State registration certificate No. RU.66.01.40.015.E.000129.07.18 dd. 06.07.2018.

Conformity certificates No. C-RU. ПБ34.В01871 dd. 24.02.2016, No. C-RU.ПБ34. В.01934 dd. 21.06.2016.

Register of JSC «Transneft», «Gazprom» Register, 000accreditation by JSC «VNIIZhT», standard process procedure 12288779.02073.00062 to paint bridges («Russian Railways»)

Expert statement by the NPO «LKP» with OMZ «Victoria», VNIIGAZ, JSC «TSNIIS», «Pamfilov Academy of Public Utilities», OJSC «Fundamentproekt».

Technical data

	Coating	
Appearance	homogeneous	
Color	grey	silver-grey
Thickness of one coat, µm	120-250	150-300
Adhesion of coating thickness not exceeding 250µm (GOST 31149, cross-cut test method)	1 adhesion grade, max.	
Adhesion of coating thickness exceeding 250µm X-cut test method ASTM D-3359	4A, min.	
ISO 16276	1 adhesion grade, max.	
Heat resistance in dry atmosphere	120 °C (short-term)	150 °C
Coating class	VI	
	Primer	
Density, g/cm ³	1.30-1.50	1.20-1.40
Brookfield apparent viscosity, mPa*c	1500-5500	1400-5400
Solids by mass, %	81.0-86.0	78.0-83.0
Pot life at a temperature (20±0.5)°C, h	2, not less than	
Theoretical spreading rate, g/m ²	230-475	315-630
Coverage, g/m ² , not less than	240	120
Drying time at a temperature (20±2)°C (GOST 19007), h		
- degree 1		4
- degree 3		6

Surface preparation

Surface preparation prior to application

- Degrease metal surface till reaching 1 grade according to GOST 9.402;
- Perform abrasive blasting to remove scale, rust and old paint to 2 grade (GOST 9.402), to grade Sa 2 ½ or Sa 2 (ISO 8501); hand and power tool cleaning of rust up to grade 3 or 4 GOST 9.402 (St 3 or St 2 ISO 8501-1) is allowed in case of repair painting; for old coatings – to P St 3 grade or P St 2 (ISO 8501-2). After cleaning thickness of the remaining coating shall not exceed 200 µm and adhesion shall be at least 2 MPa as per ISO 4624 or not more than 2 grade (GOST R 31149);
- Remove dust.

Preparation galvanized steel prior to application

- Degrease metal surface till reaching 1 grade according to GOST 9.402.

Preparation of ISOLEP-mastic prior to application of finishing enamels (if required)

- Remove dirt, oil and grease;
- wash with fresh high-pressure water;
- dry the surface.

Application

- Prior to use mix the base of enamel-primer until smooth;
- While mixing constantly add hardener (primer-enamel is ready for use).

Base/hardener mixing ratio of the primer-enamel:

- for grey color by mass 100:16.3, by volume 4.3:1;
- for silver-grey color by mass 100:14.3, by volume 5.2:1

It is recommended to apply the material in the field and workshop environment at ambient air temperature from minus 10 to plus 40 °C and relative humidity not more than 85 %.

Application procedures:

Airless spray

Recommended thinner	without
Pressure	min. 22 MPa (220 bar)
Nozzle diameter	0.017"-0.021" (0.43-0.53mm)

Conventional (air) spray

Recommended thinner	SOLV-EP (TU 20.30.22-106-12288779-2018)
Quantity	from 5 up to 10 % by mass
Pressure	0.3-0.4 MPa (3-4 bar)
Nozzle diameter	1.8-2.2 mm

Brush/roller

Recommended thinner	SOLV-EP
Quantity	from 3 up to 5 % by mass

Equipment cleaning

SOLV-EP
Thinners 646, P-4, 647, 649

When painting at ambient air temperature below minus 10 °C it is recommended to increase spray pressure for silver-grey primer-enamel.

The process provides for natural drying. The drying time of ISOLEP-mastic at temperature (20±2)°C is 10 hours prior to "handling" and 24 hours – prior to packaging and shipment.

The through dry time of the coating at temperature from 20 to 25 °C is not less than 7 days after application.

The minimum drying time (depends on the ambient air temperature, reduces when the temperature increases) before application of the next layer of enamel-primer at temperature from 20 to 25°C and relative humidity max. 85 % is not less than 6 hours.

The minimum and maximum overlap coating of ISOLEP-mastic of finishing enamels at temperature from 20 to 25 °C is shown in the below table:

Finishing painting product	Min. time	Max. time
Grey color		
POLYTON-UR (UV)	6 h	6 months
Silver-grey color		
POLYTON-UR (UV)	6 h	3 months
VINICOR-62	7 h	
POLYTON-UR	7 h	6 months

When the maximum overlap interval is exceeded additional measures to ensure adhesion may be required.

Storage and handling

The enamel-primer is delivered packed (base and hardener) in metal cans.

Storage conditions of the base and hardener - in accordance with GOST 9980.5 (at ambient air temperature from minus 40 to plus 40 °C). In storage the package shall be protected from lasting direct sunlight and atmospheric condensation. It is allowed to store the package with enamel -primer components under direct sunlight, however not more than 3 hours.

The shelf life of the base and the hardener is 24 months starting with the date of manufacture.

Precautions

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

One shall use personal protective equipment (goggles, face masks and respirators) and avoid inhalation of solvents and contact of the composition substances with skin, eye mucosa, respiratory channels; use inside the premises is allowed only in case sufficient ventilation is provided.

The primer-enamel is classified as fire-hazardous material.

The information is of general character, without consideration to the object specific nature and it is recommended to be read with the Application Guide. Use of materials for other purposes 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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