

ISOLEP®-primer

primer

(TS 20.30.12-067-12288779-2020)



Description

ISOLEP-primer is a two component high-build fast-drying polyamine cured epoxy primer. It contains anti-corrosive pigments: zinc phosphate (corrosion inhibitor) and iron mica (barrier effect). It is especially recommended for application in plant conditions.

Recommended use

Anticorrosion protection of steel articles and structures operated in the atmospheric conditions of all macroclimatic areas (from minus 60 °C), types of environment and placement categories in accordance with GOST 15150 and in all corrosivity categories C1 - C5, CX and Im3 according to GOST 34667.

It is recommended for application as a single coating system or with VMP coatings: ISOLEP-mio, POYTON-UR (UV), POLYTON-UR and VINICOR-62; with fire-proof PLAMCOR series coatings, as well as with other epoxy, vinyl-epoxy and polyurethane top coats.

Certificates, Approvals

Certificate of state registration No. RU.66.01.40.015.E.000059.03.11 dated 16.03.2011.

Conformity certificates with fire protection coatings PLAMCOR.

Transport construction: STO-01393674-007-2022 Central Research Institute of Construction JSC; STO 12288779-001-2020 State Company Avtodor.

Oil and Gas Industry: conforms to requirements of normative documents of the companies "Gazprom", "Transneft", "Rosneft", "Lukoil".

Industrial and civil construction: recommended to the application according to GOST 9.401, RD GM-02-18 Trest Gidromontazh, "Norilsk Nickel".

Approvals: Lacquer Coating Research Institute, Khotkovo town; Central scientific Research Institute of Construction, OJSC «Fundamentproekt».

Technical data

Appearance and color	Smooth coating of gray or red-brown color, shade is not standardized
Dry film thickness, µm	80 - 200
Theoretical spreading rate for one-layer coating, g/m ²	170 - 420
Adhesion	
- cross-cut test (GOST 31149)	1 grade, not more than
- pull-off test (GOST 32299/ISO 4624)	5.0 MPa, not less
Heat resistance (dry atmosphere)	120 °C (constantly), 150 °C – short-term
Density, g/cm ³	1.52±0.05
Solids	
- by mass, %	81,5±2
- by volume, %	71±2
Pot life at (20±0.5)°C, h	2, not less than
Drying time to 3 degree (GOST 19007) at (20±0.5)°C, h	3, not more than

Surface preparation

- to degrease metal surface to 1 grade according to GOST 9.402;
- abrasive blast cleaning to 2 grade according to GOST 9.402 (Sa 2 1/2 ISO 8501-1).

In tight areas it is permitted abrasive blast cleaning to St 2 or Sa 2 (ISO 8501-1);

- to remove dust.

Before the application of top coats, the primer coating ISOLEP-primer must be decontaminated, degreased and dustless.

Application

- mix the base to a homogeneous condition before application;
 - add the hardener, mixing ratio by volume 3:1, respectively, after mixing, the primer is ready for application;
 - dilute with the thinner to the working viscosity immediately before application, if necessary.
- ISOLEP-primer shall be applied at plant and field conditions at temperatures from minus 10 °C to plus 40 °C and relative air humidity not exceeding 85 %.

The temperature of the primer during application should be not less than 15 °C to ensure necessary processing characteristics.

Pot life of ISOLEP-primer depending on ambient temperature air is shown in the table:

Parameter	Ambient temperature		
	+10 °C	+20 °C	+30 °C
The pot life of ISOLEP-primer	4 h	2 h	1 h

Recommended application parameters:

Airless spray

Recommended thinner SOLV-EP (TS 20.30.22-106-12288779-2018)
 Quantity up to 5 % by mass
 Nozzle diameter 0.015"-0.021" (0.38-0.53 mm)
 Pressure min. 15 MPa (150 bar)

Conventional (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, thinners 646, P-4, petroleum solvent

When applying a primer using spraying method in the places of "spray overlap", the effect of "glossiness" of the coating is possible.

Drying is natural, the drying time of the coating with DFT of 80-100 µm, depending on the temperature, is given in the table:

Drying stage	Drying time at ambient temperature, °C					
	-10	0	10	20	30	40
To tack free, min to overcoat, h	18	10	5	2	1	0,5
To 3 degree (GOST 19007), h	25	17	6	3	2	1,5
To handle*, h	34	22	10	6	4	3
To packing and shipping *, h	41	29	17	10	6	4
To through dry, d	64	27	10	7	3	2
Maximum to overcoating - by ISOLEP-primer, ISOLEP-mio - by POLYTON-UR, POLYTON-UR (UV)	6 months 8 months					
* The specified curing time is recommended to be taken as a guideline for the technological process. In fact, the curing time depends on the temperature of the surface and ambient air, the degree of dilution of the material, the thickness of the coating, the efficiency of ventilation, the relative humidity of the air, the design features of the structures and may differ from the indicated.						

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 top coats – treatment of the coating with ISOLEP-primer using detergent MS-01 (TS 2381-095-12288779-2013).

Storage and handling

ISOLEP-primer is supplied as the base in 20, 10 and 1 litre metal containers and the curing agent in 5, 3 and 0.25 litre metal containers.

Storage conditions – in accordance with GOST 9980.5 (at air temperature from minus 40 to plus 40 °C). The material components shall be protected from direct sunlight and atmospheric condensation.

Shelf life of the components - 24 months starting with the manufacture date.

Precautions

When working with the primer, the existing sectoral standard norms and requirements and safety measures as specified on the package label shall be observed.

Personal protective equipment (goggles, face masks and respirators) shall be used, and inhalation of thinners and contact of the composition substances with skin, ocular mucosa, respiratory channels shall be avoided; use inside the premises is allowed only in case sufficient ventilation is provided.

The primer is classified as a 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 Operating Procedure. Use of materials for other purposes not specified here or in case other influencing factors are present shall be approved by VMP 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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