

ISOLEP[®]-oil 250

composition

(TU 20.30.12-081-12288779-2017)



Description

A two-component polyamine cured modified epoxy composition.

Recommended use

It is used as a coating for anticorrosive protection of the internal surface of steel tanks, reservoirs, tank cisterns, industrial pipelines.

In the case of two-layer coating, it provides long-term protection in environments with high corrosive activity: in crude oil, bottom and sea water; chemical solutions with weak acid medium (pH 5-7) and weakly alkaline (pH 8-11) media, washing fluids.

In single-layer application, it protects the steel when it comes in contact with commercial oil, liquefied natural gas, lube oils and lubricants, lubricating fluids.

The coating is highly abrasion resistant. Recommended operating temperature in liquid fluids is up to plus 60 °C (for a short time it is allowed up to plus 75 °C, it can stand steaming operation).

Certificates, Approvals

Certificate of state registration No. RU.66.01.40.015.E.000109.08.17 dated 24.08.2017.

Approved by testing center LLC SPA Coating industry, Khotkovo.

Oil and gas Industry: registers of JSC Transneft, Lukoil, Surgutneftegas.

Technical data

	Coating
Color of coating	gray, pink
Gloss value of coating	glossy
Dry film thickness, μm	125-200
	Composition
Density of composition, g/cm ³	1.40-1.55
Pot life at temperature (20±2) °C, h	1.5, not less
Drying time (GOST 19007), h:	
to 1 degree at a temperature (23±2)°C	4.0
to 3 degree at a temperature (23±2)°C	8.0
Wet film thickness, μm	170-270
Theoretical spreading rate of one-layer coating, g/m ²	240-380
Non-volatile matters	
by average volume, % volume	75
by mass, % mass	83-87

Surface preparation

- degrease metal surface till 1 grade according to GOST 9.402;
- perform abrasive blasting to remove scale and corrosion to grade not less than Sa 2 1/2 according to ISO 8501-1 (2 according to GOST 9.402). Surface profile is sharp, angular with a roughness of 85-115 μm (segment 3G according to ISO 8503-2);
- remove dust.

The material should be applied no later than 6 hours after abrasive blasting.

If it is necessary to apply a second layer of material, the application surface must be clean from dirt, degreased, dust-free and dry.

Application

Mix the base to a homogeneous condition before application; with constant stirring, add the hardener to the base, mix thoroughly for 2-3 minutes to a homogeneous condition.

The proportion of base and hardener: by mass 6.2:1, by volume 4:1

The pot life (after mixing the components) at ambient temperature (20±2)°C is not less than 1 hour. For the organization of painting, the decrease of the pot life with increasing temperature should be taken into account.

The material may be applied at an ambient temperature of 0 to plus 40 °C and relative humidity not more than 80 %.

The temperature of the surface to be painted must be above the dew point by at least 3 °C, but not above plus 40 °C.

When painting, the temperature of the material must be not less than plus 15 °C.

It is recommended to use both single-layer and two-layer coating depending on the operating environment (please refer to "Recommended use" or further clarify from the manufacturer).

Recommended application

Airless spray

Recommended thinner SOLV-EP (TU 20.30.22-106-12288779-2018)
Quantity Not more than 5 % by mass
Pressure 20-30 MPa
Nozzle 0.015"-0.021" (0.38-0.53 mm)

Conventional (air) spray

Recommended thinner SOLV-EP
Quantity Not more than 5 % by mass

Brush/roller

Recommended thinner SOLV-EP
Quantity Not more than 5 % by mass

Equipment cleaning

SOLV-EP, thinners 646, 647, 649

Drying of the coating is natural. As the temperature increases, the drying time shortens.

The minimum and maximum exposure time of ISOLEP-oil 250 coating before the next layer application (if necessary), as well as the time for its full hardening (start time for use) are given in the table (for a dry film thickness of 150 µm).

Stages of drying	Time, h (hours), d (days) at ambient temperature, °C							
	0	+5	+10	+15	+20	+25	+30	+40
Tack free	29 h	22 h	15 h	9 h	4.5 h	3.5 h	2.5 h	1 h
Overcoating interval, min	38 h	30 h	20 h	13 h	8 h	5 h	3.5 h	2.5 h
Overcoating interval, max	13 d	10 d	7 d	5 d	4 d	4 d	3 d	2 d
Through dry	27 d	20 d	15 d	10 d	7 d	6 d	4 d	2 d

The specified hardening time is recommended to be taken as indicative of practical coloring. The hardening time depends on the surface temperature and ambient air, the degree of dilution of the material, the thickness of the coating, the efficiency of ventilation and the relative humidity of the air.

If the maximum overlap time is exceeded, it is necessary to carry out an additional surface treatment for roughening (light sweeping).

Storage and handling

The composition is delivered in packages: base and hardener packed in metal buckets and metal cans.

Storage conditions – in accordance with GOST 9980.5 (at air temperature from minus 40 to plus 40 °C). The material components shall be stored away from heat sources, the container shall be protected from direct sunlight (short-term - not more than 3 hours is allowed) and atmospheric condensation.

Shelf life of the composition base and hardener – 24 months starting with the manufacture date.

Precautions

When working with the composition, 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 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 and its components (base and hardener) are fire-hazardous!

The hardened coating is not harmful to human health.

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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