

## Description

Two-packed epoxy composition, consisting of a base and a hardener. The base is a suspension of pigments, extender and functional additives in a solution of a modified epoxy resin in a mixture of organic thinners. Hardener – aliphatic polyamine resin.

## Recommended use

It is used as an independent coating for anticorrosive protection of the internal surface of steel tanks, reservoirs, tank cisterns, industrial pipelines that come into contact with crude oil and commercial oil, fuel oil; bottom, sea and fresh water; chemical solutions with weak acid medium (pH 5-7) and weakly alkaline (pH 8-11) media, washing fluids.

It is characterized by a high content of non-volatile matters, makes it possible to obtain a high-build abrasion-resistant coating with high protective properties. The recommended operating temperature is up to plus 60 °C (for a short time it is allowed up to plus 75 °C, it can stand steaming operation).

The light color of the coating (gray) simplifies the process of inspecting and accepting the coating on the inner surface of tanks and reservoirs.

## Certificates, Approvals

Certificate of state registration No. RU.66.01.40.015.E.000124.07.18 dated 05.07.2018.

The Register of core products of PJSC "Transneft".

Decision of All-union Pipeline Construction Scientific and Research Institute for heavier-duty coating with a projected working life of 20 years.

## Technical data

	Coating
Color of coating	gray
Gloss value of coating	glossy
Dry film thickness, μm	300-500
	Composition
Density of composition, g/cm <sup>3</sup>	1.40-1.55
Working life at temperature (20±2)°C, h	1, not less
Drying time at a temperature, h, not more	
- to 1 degree (GOST 19007) at temperature (23±2) °C	4.5
- to 3 degree (GOST 19007) at temperature (23±2) °C	8.0
- "to tack disappearance" at temperature (20±2) °C	6.0
Wet film thickness, μm	350-580
Theoretical consumption one-layer coating, g/m <sup>2</sup>	465-775
Non-volatile matters	
by average volume, % volume	90
by mass, % mass	90-95

## Surface preparation

- to degrease metal surface to 1 grade according to GOST 9.402;
- to do abrasive blast cleaning of scale and corrosion to grade not less than 2 according to GOST 9.402 (Sa 2½ according to ISO 8501-1). Surface profile is sharp, angular with a roughness of 85-115 μm (segment 3G according to ISO 8503-2);
- to remove dust.

Reducing the surface preparation grade and application on a smooth surface without a roughening is not allowed. The allowed interval between preparation of the surface and application of the first coating layer should not exceed 6 hours in the absence of sweating on the surface and exclusion of any variety of contamination.

## Application

- mix the base to a homogeneous condition before application;
- add a hardener to the base (mixing ratio of base and hardener: 3.6:1 by volume);
- mix thoroughly with an electric mixing machine.

The pot life of the material (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 plus 5 to plus 40 °C (recommended from plus 5 to plus 30 °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.

Application by airless spray is recommended in 1 layer, brush or roller – 2-3 layers allowed. Drying of the coating is natural. As the temperature increases, the drying time shortens.

Drying time "to tack free", as well as the time for complete hardening (drying for service) are given in the table (for a dry film thickness of 300 µm).

Stages in drying	Time, h (hours), d (day) at ambient temperature, ° C						
	+5	+10	+15	+20	+25	+30	+40
To tack free	26 h	17 h	11 h	6 h	5 h	4 h	2.5 h
Drying for service	14 d	11 d	9 d	7 d	6 d	4 d	2.5 d

The required hardening time is recommended as an approximate for practical coloring. Hardening time depends on the surface temperature and ambient air, the dilution ratio of the material, the coating thickness, the efficiency of ventilation and the relative air humidity.

Recommended application methods:

**Airless spray\***

Recommended thinner Dilution is not recommended  
Nozzle diameter 0.015"-0.021" (0.38-0.53 mm)  
Pressure 20-30 MPa (200-300 bar)

**Brush/roller**

Recommended thinner SOLV-EP (TU 20.30.22-106-12288779-2018)  
Quantity not more than 3-5 % by mass

**Equipment cleaning**

SOLV-EP  
thinners 646, 647, 649

\* For application use airless spraying equipment with a feed rate of material not less than 6 l/min

## **Storage and handling**

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

Storage and transportation conditions – in accordance with GOST 9980.5 at air temperature from minus 40 to plus 40 °C. When storing the container should not be exposed to atmospheric precipitation and direct sunlight, short-term storage of the container under direct sunlight is allowed, but not more than 3 hours.

Shelf life in hermetically enclosed containers while meeting the requirements is 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) should be used, and inhalation of thinners and contact of the composition 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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