

VINICOR® BEP-5297

enamel
(TU 20.30.12-012-67503963-2018)



Description

Double-packed epoxy enamel.
The base is a pigment-and-epoxide-fillers suspension. Amine-type hardener.

Recommended use

Anticorrosive protection of concrete, reinforced concrete and steel surfaces of reservoirs, tanks, silo bunkers and containers contact with bulk and fluid food products at temperatures up to 60 °C: groats, sugar, flour, drinking water, beer, wine, fruit and vegetable juices, vegetable oil, fat-containing products.

The white-colored enamel is applied in case of direct contact with foods; the application of pink- and brown-colored enamel is allowed for different perimeter structures (walls, floors, ceilings, columns surfaces that are subject to sanitary and epidemiological inspection).

Certificates, Approvals

State registration certificate No. RU.77.01.34.008.E.001883.07.18 dated 19.07.2018
Records: No. 8221 12 dated 03.07.2018, No. 38-4436 dated 31.05.2018 of the Experimental Center Federal Budget Healthcare Institution "Hygiene and epidemiology center in Moscow city". Expert decision No. 77.01.12.П.001998.07.18 of the Experimental Center Federal Budget Healthcare Institution "Hygiene and epidemiology center in Moscow city" dated 09.07.2018

Technical data

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| Color of coating | white, pink, brown |
| Appearance of coating | semi-gloss |
| Density of the enamel, g/cm ³ | 1.85±0.15 |
| Viscosity | thixotropic |
| Pot life at temperature (20±2)°C, min, not less than | 40 |
| Non-volatile matter content | |
| – by volume, % (volume) | 88±4 |
| – by mass, % (mass) | not less than 92 |
| Drying time to 3 degree (GOST 19007), at temperature (20±2)°C, h | 16 |
| Dry film thickness, µm | 100-150 |
| Wet film thickness, µm | 110-170 |
| Theoretical spreading rate of one-layer coating, g/m ² | 215-325 |

Surface preparation

Metal surface:

- to degrease the metal surface to 1 grade according to GOST 9.402;
- to do abrasive blast cleaning, with the abrasive to obtain grit profile, from scale, corrosion products and old coatings to at least Sa 2 ½ grade with angled, grit surface profile, recommended rough profile Rz=60÷80 µm (GRIT comparator according to ISO 8503-2: medium- rough between the 2 and 3 segments, but lower than the 3 segment);
- to remove dust.

Before applying the second layer, the coating shall be dry, clean, oil and dust shall be removed.

Concrete surface:

prepared for application of the coating, it shall be evenly rough, without protruding fittings, cracks, pot-holes, popouts, overlaps, arris spalling, oil stains, dirt and dust.

The operating procedures:

- to remove dirt, oil and grease;
- to remove lime milk (cement slurry), destroyed or flaking concrete layers and old coatings by abrasive cleaning, grinding machine or brushes;
- to remove dust;
- to repair crack bridging and spalls.

Holding time of the concrete base after concrete placement before the primer application shall be at least 28 days; after the application of leveling compounds – according to the reference documentation of the compound manufacturer. Surface moisture (in the surface layer of 20 mm thick) is not more than 4%.

Application

- mix the base thoroughly to homogenous condition before application;
- with constant stirring, add the hardener to the base and mix thoroughly (the ratio of the base and hardener stated on the label of the package and in the material quality certificate).
- the material is delivered with the working viscosity, dilution is not required;

After components mix, pot life of the enamel depends on air temperature is at least 40 minutes at temperature plus (20±2) °C.

When working, one shall consider decrease in pot life at air temperature increase! The prepared material shall be applied within the stated period of time.

The material is recommended to be applied in the plant and field conditions at temperature from plus 5 to plus 30 °C and relative air humidity not more than 80 %. The temperature of the painted surface shall be above the dew point by at least 3 °C.

Prepared enamel shall be of temperature at least 15 °C.

Before applying the basic enamel layers to a concrete surface, it is necessary to apply the impregnating layer: the VINICOR BEP-5297 enamel diluted with the SOLVIN-13 thinner, not more than 10 % of mass. Hardening time of the impregnating layer before the enamel overlapping is not less than 16 hours at plus (20±2) °C, it depends on air temperature and concrete surface condition.

The enamel is recommended to be applied in 1-2 layers.

Recommended application methods:

Airless spray

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| Recommended thinners | without |
| Pressure | 18-22 MPa (180-220 bar) |
| Nozzle diameter | 0.017"-0.021" (0.43-0.53 mm) |

Brush

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| Recommended thinners | without |
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Equipment cleaning

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Hardening time depends on the air and surface temperature, coating thickness, ventilation efficiency, and relative air humidity.

Hardening time of the coating before applying the next enamel layer is not less than 24 hours at temperature plus (20±2) °C.

Before use, the container painted with the VINICOR BEP-5297 enamel shall be washed in accordance with the requirements for each product type.

Holding time of the coating after previous layer drying, before washing:

- at temperature more than 20 °C – not less than 7 days;
- at temperature from 15 to 19 °C – not less than 15 days;
- at temperature less than 15 °C – not less than 25 days.

Before applying the material, it is recommended to observe the detailed technological instruction for VINICOR BEP-5297 enamel application and/or contact with the technical specialist for consultation.

Storage and handling

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

Storage conditions – according to GOST 9980.5 (at air temperature from minus 40 to plus 40 °C).

The container with the material components shall be stored away from heating sources, protected from atmospheric condensation and direct sunlight.

The shelf life of the VINICOR BEP-5297 enamel components in hermetically enclosed original containers: the base – 12 months starting with the manufacture date, the hardener – stated in the hardener quality certificate.

Precautions

When working, 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), avoid inhalation of thinners and contact of the material or its components with skin, eye mucosa, respiratory channels; use inside the premises is allowed only in case sufficient ventilation is provided.

The material and its components (the base and hardener) are fire-hazardous!

Hardened coating is not harmful.

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 Close joint stock company "Scientific Industrial Holding «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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