VINICOR®-marine

enamel **(TU 20.30.12-004-67503963-2018)**



Description

Double-packed epoxy enamel, thixotropic, with low content of organic solvents, allows to apply thick coating. VINICOR-marine coating is resistant to sea and fresh water, crude oil, oil products, and other environments, sudden temperature changes from minus 50 °C to plus 60 °C.

Recommended use

Is applied as a finishing protective coating with VINICOR-marine primer in complex corrosion protection systems of underwater hull and freeboard, variable waterline area, superstructures of unrestricted navigation ships, hydrotechnical constructions, and metal structures used in sea, fresh water and atmospheric conditions (in lack or low intensity of UV-radiation).

Certificates, Approvals

State registration certificate No. RU.77.01.34.008.E.003541.12.18 dated 20.12.2018.

VINICOR-marine coating system is approved by FSUE "Prometey" and has decision of MVK for use of materials in ship construction.

It has a certificate of Russian River Register voluntary certification system No. POCC RU.PO00.H00269.

Technical data

Color of coating	gray, black, red-brown and other colors by agreement with the client
Gloss of coating	semi-gloss
Density of the enamel, g/cm ³	1.4±0.1
Viscosity of the enamel	thixotropic
Pot life at temperature (20±2)°C,	
h, not less than	8
Non-volatile matter content	
by volume, % (volume)	71±2
by mass, % (mass)	82.5±2.5
Drying time to 3 degree (GOST 19007),	
at temperature (20.0±2)°C, h, not more than	24
Dry film thickness, μm	100-150
Wet film thickness, µm	140-210
Theoretical spreading rate of one-layer coating, g/m ²	190-290

Surface preparation

VINICOR-marine primer coating shall be clean, degreased, if required, oil and dust shall be removed.

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);
 - dilute to working viscosity, if required;
 - before application, the prepared material shall be held for 15-20 minutes covered.

When working, one shall consider decrease in pot life of the composition (after mixing the components) at air temperature increase.

The material is recommended to be applied in the plant and field conditions at temperature from plus 5 to plus 35 $^{\circ}$ C and relative air humidity not more than 85% (application at temperature from minus 5 $^{\circ}$ C is allowed). The temperature of the painted surface shall be above the dew point by at least 3 $^{\circ}$ C. Prepared enamel shall be of temperature at least 15 $^{\circ}$ C.

The enamel is recommended to be applied in 1-2 layers using airless spray, by brush/roller.

Recommended application methods:

Airless spray

Recommended thinners SOLVIN-12 (TU 20.30.22-014-67503963-2018)

Quantity of thinner up to 5 % by mass

Pressure 15-22 MPa (150-220 bar)

Nozzle diameter 0.015"-0.021" (0.38-0.53 mm)

Brush

Recommended thinners SOLVIN-12
Quantity of thinner up to 5% by mass **Equipment cleaning** SOLVIN-12,
646, P-4 thinners

Drying of the coat is natural. Intermediate drying between the layers of the VINICOR-marine enamel at temperature of plus 20 °C is not less than 24 hours.

Holding time of the VINICOR-marine coating system before operating in aggressive environments is not less than 7 days at temperature of 20 °C.

Storage and handling

The material is delivered in packages: the base and hardener packed in metal buckets and metal cans respectively depending on the package weight.

Storage conditions – according to GOST 9980.5 (at air temperature from minus 40 to plus 35 °C). The container with the material components shall be stored away from heating sources, protected from atmospheric condensation and direct sunlight.

The shelf life is determined by the storage period of the base (24 months) and the hardener (stated in the quality certificate) starting with the manufacture date.

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 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.



VMP RESEARCH & PRODUCTION HOLDING CJSC

Ekaterinburg +7 (343) 357-30-97; 385-79-00; 385-66-10, office@fmp.ru **Moscow** +7 (495) 411-65-03; 411-65-04, msk@fmp.ru **Saint Petersburg** +7 (812) 640-55-20; 676-20-20, spb@fmp.ru For representation offices of the "VMP" in Russia and abroad: **vmp-holding.com**