

VINICOR[®] -marine AF

antifouling enamel

(TS 20.30.12-020-67503963-2019)



Description

Antifouling tin-free enamel based on a mix of synthetic resins. One-pack.

Purpose and Scope

For long-term protection against fouling of ships of unrestricted navigation area, including various types of watercrafts with slow and moderate speeds, long moorage periods, stationary facilities in areas with high fouling activity. Designed for the use in shipbuilding and ship repair.

Can be applied at subzero temperatures.

The enamel is used: as a finish coat in complex coating systems with VINICOR-marine materials, VINICOR enamel primer, and other epoxy-based primers and enamel primers.

Certification, tests

Certificate of state registration No. RU.77.01.34.008.E.003248.12.21 dated 20.12.2021.

Certificate of type approval: No. 22.44.01.03209.120 by the RUSSIAN REGISTER OF SHIPPING (type of antifouling system: standard type without tin-containing organic compounds).

Certificate of the Voluntary Certification System of the RUSSIAN RIVER REGISTER No. ROSS RU.RO00.N00432.

Specifications

Finish coat color	reddish-brown, brown, black, blue (color shade is not standardized).
Coating appearance	matt homogeneous
Enamel density, g/cm ³	1.85 ± 0.25
Non-volatile matter content	50 ± 3
by volume, % (vol.), by weight, % (wt.)	75 ± 5
Drying time to degree 3 (in accordance with GOST 19007) @ (20 ± 3 2)°C, h, not more than	
Dry film thickness, μm	70 - 150
Wet film thickness, μm	140 - 300
Theoretical consumption for a single layer, g/m ²	252 - 540

Surface treatment

The undercoat shall be cleaned from contaminations, degreased if required, free from dust and moisture.

Instruction for use

- Before use, mix the enamel until homogenous
- Dilute to the viscosity suitable for application, as required.

The recommended temperatures for application in shop and field conditions are -5 to +35°C and the maximum relative air humidity 85%. The temperature of the surface to be painted shall be at least 3°C above the dew point.

The enamel prepared for application shall have a temperature of at least +15°C.

It is recommended to apply the enamel in 1-2 layers by airless/pneumatic (air) spraying, with a brush/roller.

Recommended application parameters:

Airless spraying

Recommended thinners SOLVIN-15 (TU 20.30.22-014-67503963-2018)
Amount of thinner up to 10% by weight
Pressure 15-22 MPa (150-220 bar)
Nozzle diameter 0.015" - 0.021" (0.38 mm - 0.53 mm)

Pneumatic application

Recommended thinners SOLVIN-15
Amount of thinner up to 10% by weight
Pressure 0.2 - 0.4 MPa (2 - 4 bar)
Nozzle diameter 1.8 - 2.2 mm

Brush/roller

Recommended thinners SOLVIN-15
Amount of thinner up to 10% by weight

Equipment cleaning

SOLVIN-15; R-4 grade, toluene, xylene

The coating is dried naturally, the parameters are provided in the following table:

Drying stage	Time, h (hours), @ ambient air temperature, °C								
	-5	0	+5	+10	+15	+20	+25	+30	+35
Hardening time at DFT 100 µm									
To degree 1 as per GOST 19007, h	9	6	4.5	3	2.5	2	1	40 min.	30 min.
To degree 3 as per GOST 19007, h	18	12	9	6	5	4	2	1.5	1
Complete hardening, days	36	24	14	8	8.5	7	6	5	4
<i>* It is recommended to use the above-mentioned hardening time as a guideline for the process. The actual hardening time depends on the surface and ambient air temperature, material dilution ratio, coating thickness, ventilation efficiency, relative air humidity, structural features of the painted surfaces and can be different from the specified.</i>									

Packaging and storage

The enamel is packaged in metal buckets or metal cans.

Storage and transportation of the enamel shall be in accordance with GOST 9980.5 (at ambient air temperatures from -30°C to +40°C). Protect the containers with enamel from precipitation and direct sunlight.

The guaranteed shelf life of the enamel is 24 months from the date of manufacture.

Safety precautions

During the use of the product, observe the relevant industry standards and requirements, as well as the precautions indicated on the container label.

Use personal protective equipment (goggles, masks, respirators), avoid inhalation of solvents during evaporation and contact of the material or its components with skin, mucous membranes of eyes and respiratory tract; use indoors only if sufficient ventilation is provided.

The material and its components are flammable!

The information provided is general in nature and does not take into account the specifics of a particular facility and should be considered in conjunction with the application guide. The use of the material for any purpose not specified herein or under the impact of any other factors shall be approved by VMP in a written form. In its absence, the manufacturer is not responsible for improper use of the material, and the buyer loses the right to make claims and have the claims satisfied related to the quality of the resulting coating.



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