

Primer-enamel 3 in 1 Anticor Aqua

Specification

A single-component, water-based acrylic primer-enamel functionally combines an adhesion primer, anticorrosion protection and finishing enamel. It creates anticorrosion coating resistant to water effects, weather effects, industrial oils and domestic detergents. It is characterized by high durability and perfect adhesion to the base surface.



Sphere of application

It is intended for anticorrosion protection and decorative coating of surfaces made of black and galvanized metals (clean or coated with corrosion if the thickness of the corrosion layer is up to 100 microns), aluminum. It is also good on wooden and mineral surfaces. The primer-enamel is recommended for coating equipment and machinery, construction elements, railway vehicles, farming machinery, fences, gates, roofs, drain pipes and other metal surfaces. It is intended for interior and exterior applications. It can be applied on surfaces, which are exploited in conditions of atmospheric corrosion activity of category C4 (DSTU ISO 12944-2).

Technical data

Consumption standard of 1 layer	80-120 g/m ² , depending on the type of the surface and the method of application.
Thinner	Water. It is allowed diluting the product 5% on the total mass.
Application	Apply it with a roller, a brush or a spraying gun.
Drying period (23 °C, 50% RH)	2 hours. Drying period increases if the temperature is getting down and the relative air humidity is increasing
Solids content (DSTU ISO 3251)	39±2% (Black, Graphite, Chocolate, Yellow, Orange, Red, Cherry, Dark Blue). 42±2% (Black silky-matt, Grey, Green). 48±2% (White).
Non-volatile matter by volume (DSTU ISO 3233)	35±2% (Black, Graphite, Chocolate, Red, Cherry). 37±2% (Black silky-matt, Grey, Orange, Yellow, Dark Blue, Green). 40±2% (White).
Density (DSTU ISO 2811-1)	≈ 1.03-1.06 g/cm ³ (Black, Graphite, Chocolate, Yellow, Orange, Red, Cherry, Dark Blue, Green). ≈ 1.01 g/cm ³ (Black silky-matt, Grey). ≈ 1.15 g/cm ³ (White).
Hardness (DSTU ISO 1522)	about 40 sec.
Gloss (DSTU ISO 2813)	Glossy. Minimum 60 GU at 60°
VOC content (ISO 11890)	50±5 g/l
Warranty period	36 months from the date of manufacturing (at the temperature from +5 °C to +35 °C)
Color	white, graphite, grey, black, chocolate.
Gloss	glossy.

Composition

Acrylic dispersion, water, pigments, fillers, anticorrosion and other additives.

Tinting

The product can be tinted manually with pigment concentrate Farbex Color and other tinting pastes or in a tinting machine according to NCS color catalog and others. We recommend adding a maximum 2% colorant dose of the primer-enamel weight, as it can affect anticorrosion properties. If the product is meant to be applied on surfaces in aggressive conditions C4 (industrial and pre-shore regions with moderate saltiness), we don't recommend tinting the product individually. In this case, it's better to use colors from the assortment or ask for help from the manufacturer.

To avoid differences in the shades of color, we recommend using the product from the same batch. In case you use the product from different batches it is necessary to mix them.



It is recommended a trial application on a small area of the surface to check the correspondence of the tinted product to the chosen color.

After tinting some insignificant deviations in technical data for the product are allowed.

Application instruction

1 Surface preparation

The surface shall be dry, and thoroughly cleaned from dust, dirt, oily and other contaminations, loose paint coats and corrosion. Metal surfaces shall be treated manually with special tools (min degree St2) or with abrasive jet cleaning (min degree Sa2½) according to DSTU ISO 8501-1. If applying on previously coated surfaces, clean the surface mechanically from loose paint coatings and corrosion till hard base surface and treat with sandpaper for necessary surface roughness. Degrease the surface with a universal thinner TM Maxima or with a solution of detergents (concentration shall be according to manufacturing directions; under the pressure, depending on the type of contaminations, which are necessary to remove). Then clean the surface with pure running water and let it dry. Use of other organic diluents is allowed after confirmation from the POLYSAN consultant.

2 Priming

It doesn't require priming before coating metal surfaces.

Prime wooden surfaces with wood-protective primer TM Maxima, mineral surfaces - with primer-concentrate 1:10 "Aqua Primer" TM Maxima.

3 Application

Stir primer-enamel thoroughly before use. The product is ready to use. If necessary dilute with water (max. 5% of the total weight of the primer-enamel, abnormal dilution causes degradation of the product's durability, runs and makes hardening slower). Coat the surface with 2 layers indoors and with 3 layers outdoors to provide optimal surface properties. Carry out the application at the temperature of air and surface from +10 °C till +30 °C and relative air humidity less 80% (the temperature shall be higher than 3 degrees above dew point). During the application and drying period, appropriate ventilation shall be provided.

Do not apply primer-enamel under direct sunlight, strong wind, precipitation and frost.

Primer-enamel can be applied in several ways

Way of application	Quantity of diluent	Jet size	Pressure
Airless spraying	0 – 5 %	0.017" - 0.023"	15 MPa (≈ 150 bar)
Pneumatic spraying	0 – 5 %	2 – 2,5 mm	0,3 – 0,5 MPa (≈ 3-5 bar)
A brush / a roller	0 – 5 %	-	-

Drying period

Temperature	10 °C	23 °C	30 °C
Drying period "to touch"	3 h	2 h	40 min
Drying period till the next coat application, min	7 h	4 h	2 h
The drying period enough for exploitation coating	10 days	7 days	3 days
Full hardening (polymerization)	21 days	14 days	7 days

The period of drying and polymerization are determined at a controlled temperature and relative humidity of less than 80%. The dry film thickness of the coating shall be 40 microns.

Drying period "to touch" - when the film becomes not sticky and a light finger press remains no print.

The drying period till the next coat application, min is a minimal recommended period, after which the next coat can be applied.

The drying period is enough for surface exploitation - a minimal period, after which the coating can resist external effects like shipping, exploitation and alike.

Complete drying (polymerization) - the period, after which the coating achieves the whole complex of physical and chemical features.

The thickness of a single-layer coating if consumption is different

Consumption	80 g/m ²	100 g/m ²	120 g/m ²
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Thickness of dry film	30 microns	35 microns	40 microns
Thickness of wet film	70-75 microns	85-95 microns	100-115 microns
Standard application rate (mass and volume)	13,2-14,4 m ² /l	10,6-11,5 m ² /l	8,8-9,6 m ² /l
	12,5 m ² /kg	10 m ² /kg	8,3 m ² /kg

Compatibility with other coatings

Depending on the conditions of exploitation of the product you may use various priming and finishing coatings. The samples of compatibility find below. For more precise recommendations ask for help from the specialist of POLYSAN company.

The previous coat - alkyd-based, acrylic-based, epoxy and water-based and solvent-based polyurethane products.

The subsequent coat - alkyd-based, acrylic-based, epoxy and **water-based** polyurethane products.

Compatibility of the products is recommended to test on a small area of the surface.

4 Tool cleaning

Wash the tools thoroughly with water. Do not let them dry.

SAFETY

Do not mix with other products and (or) organic solvents! Store in tightly closed original containers at the temperature from + 5 °C till + 35 °C. Keep away from moisture, direct sunlight and frost. Keep it distantly from food and in places out of reach of the children. Use individual safe gear when applying. Provide effective ventilation of the premises when applying indoors. When skin contact wash thoroughly with water and soap. When eye contact rinse with plenty of running water. If necessary call a doctor. VOC content: cat. A/i (WB): < 140 g/l. Actual VOC content 60 g/l. It doesn't contain lead and its compounds. More detailed information is in the safety data sheet.

ENVIRONMENTAL PROTECTION

Do not empty into the drains, ponds, or in the soil! Recycle rests of the product and empty containers as usual construction waste according to the Law.

The authenticity of this information is based on laboratory tests and practical knowledge. The quality of the product completely corresponds to the demands of TU U 20.3-32318370-022:2021. As a manufacturer, the company isn't responsible for the damage caused by application, which is not in accordance with the directions. Applicability of the product for specific purposes shall be defined entirely by the consumer. Current information loses validity with the issue of a new edition.

