



Alkyd-styrene primer enamel Defens AL.ST-01(1K)

DEFENS™

Description

A single-component fast-drying alkyd styrene-modified primer enamel with anti-corrosion functional additions. It creates a uniform semi-gloss coating

Purpose and designated area

It is used as a protection and finish of metal, concrete, wood and galvanized coatings, for which fast coating formation is important.

It is applied on previously primed surfaces or as an independent coating on structures exposed to environments with an average degree of aggressiveness.

Formed coating is resistant to salt water, mineral oils, sunlight.

It is also used for painting of metal structures, transformer pillars, containers for highway transportation operations, metal and reinforced-concrete building constructions, as well as other objects operated under the condition of moderate corrosive attack of the atmospheric environment.

The service life of the coating is not less than 7 years on condition of appropriate pretreatment and priming of the surface.

It can be applied by air or air-free methods of dispersing, as well as with a roller or brush. Due to the low toxicity of contained solvents, the primer enamel is easy to apply. Tinting is possible in any color at the customer's request according to the RAL scale.

Due to the anti-corrosion additions, it allows to provide high safety features of the system with an excellent quality-price ratio

Specifications

Name of indicator and unit of measurement	Indicator value
Physical form of the coating	Self half-matt surface without any impurities, bits and pin holes
Non-volatile matter content, %, not less	60
Conditional viscosity by viscometer VZ-246 with nozzle diameter 4 mm at temperature (20 ⁰ C) , s	from 60 up to 120
Density at temperature (20±0,5) °C, g/cm ³	from 1,2 up to 1,4
Milling degree, μm, not more	30
Coverage rate of the dries film, kg/m ² , not more	0,140
Drying time up to degree 3 at a temperature (20±2)°C, minutes, not more	30
Adhesion, points, not more	1
Flexural resistance, mm, not more	1
Impact strength, cm, not less	50
Recommended coating thickness, μm	60-120
Resistance to the static exposure to: - water at a temperature (20,0±2)°C , days, not less	3
-3 % NaCl solution at a temperature (20±2) °C, days, not less	3
- industrial oil at a temperature (20±2) °C, days, not less	3
Approximate consumption of the primer enamel on a one-layer coating with a dry film thickness of 50 μm, kg/m ² , (on condition that it is applied by airless spraying equipment)	0,145

Requirements to the base

The metal surface should be dry, free of rust, debris, dust, oils, fats and other contaminants that may act as separators. If necessary, handle the base with a sand- and bead-blasting method to degree Sa 2-2,5 (ISO 8501-1:2007). After cleaning, galvanized surface must be removed from dust and degreased.

Cement-containing and stone surfaces should be clean, dry (humidity is not more than 5%), without traces of bleed water, dirt, oil, as well as withstand design loads (compression capacity is not less than 200 kp/cm²), contain no fragile and stuck-on particles. If necessary, handle the base with a sand- and bead-blasting method, milling or polishing. After processing, the surface should be removed from dust and saturated with the DEFENS materials.

Previously painted surfaces suitable for repainting. Remove impurities (e.g., grease and salts). Surfaces must be dry and clean. Old surfaces with a painting that has exceeded the maximum application time of the next coat should be ground to roughness. Damaged surface areas should be handled in accordance with accepted procedures on how to prepare the base and maintenance operations. Place and time of pre-finishing of the surface for applying the paint should be chosen so that the neat surface remains dry and clean until the next stage of painting the product.

Application

Before applying, the primer enamel should be thoroughly mixed for at least 5 minutes until an even consistency is obtained. Apply it on the prepared base by air or air-free methods of dispersing, as well as with a roller or brush. To obtain the material of necessary application viscosity, it is possible to add the mixed solvent (xylele). When working with primer enamels at low temperatures, it is recommended to use highly volatile solvents (ethyl acetate). The surface to be painted should be dry and have a temperature of a 3 °C above the dew point. Recommended number of layers is 1-2. Perform the work in accordance with the ISO 12944-7:2017 standard

Package and storing

The paint is stored in a tightly closed packaging at a temperature from -20 up to +30°C, away from moisture and direct sunlight, heat sources. Warranted storage life is 12 months from the date of production without violation of storage conditions. Slight delamination is allowed during the long-term storage, but it does not affect the quality of the material.

Tool cleaning

Work tools and facilities are washed with solvent or xylele immediately after their usage.

Protective measures

This product is intended only for professional use in industrial facilities in accordance with recommendations given here, as well as safety directions provided to customers along with paint containers. All work, including the application and usage of the product, must comply with Health, Safety and Environmental requirements, all regional standards and instructions.

When painting use personal protective equipment, avoid of getting in eyes, respiratory tracts and on skin. Keep away from open flame.

Exception

The information given in this list is not designed to be exhaustive and any person applying the product for any other purpose not reflected in this list without receiving our written confirmation on its suitability does so at their own risk. We try to ensure that all recommendations regarding the product (in this or that list) are correct, but we cannot control the quality and condition of the surface to be painted, as well as take into account the influence of many other factors impacting on the way the product is used and applied. Therefore, if we in written form certainly disagree to do so, we are not responsible for whatever and whichever way it happens due to the product usage or for any loss or damage caused by the product usage. The information given in this list in the light of our experience and policy of continuous product development is subject to change from time to time. The responsibility of the user is to verify before applying the product that this list is currently valid.