



Alkyd-urethane primer enamel Defens AL.UR-02(1K)

DEFENS™

Description

A single-component alkyd-urethane primer enamel contains anti-corrosion additions that increase protective properties of the formed coating. Its modification with polyurethane increases resistance in excited environments and to UV radiation.

Purpose and designated area

It is designed for metal, concrete with a long-term operation of up to 10 years. It has increased resistance to atmospheric actions.

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. It can be used as primer, as well as an independent coating or finishing in anti-corrosion protection systems for steel surfaces exposed to mechanical or chemical effects, as well as atmospheric actions in humid climate and industrial environments.

It is recommended for painting of railway rolling stock, highway transport, painting of bridges, steel and reinforced concrete structures, tankers, chemical and petrochemical industries equipment, harbor and dock-side installations, sea- and river going vessels, power transmission towers and so on.

Tinting is possible in any color at the customer's request according to the RAL scale.

The optimal low-cost coating

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	not less 65
Density at temperature (20±0,5) °C, g/cm ³	from 1,2 up to 1,5
Milling degree, μm, not more	30
Adhesion, points, not more	1
Flexural resistance, mm, not more	2
Impact strength, cm, not less	50
Recommended coating thickness, μm	60-120
Drying time of a layer 40 microns to degree 3 at 25 °C, h, not more	3,5
Coverage rate, g/m ² ., not more	100
Hardness by the pendulum device TML type (pendulum A), conventional units, not less	0,20
Resistance to the exposure to: - sea water, days(20 °C,) not less	10
Resistance to the exposure to water, days(20 °C,) not less	10
Approximate consumption of the material when using airless spraying equipment with a coating thickness of 60 μm, kg/m ²	0,165
Recommended number of layers	2
Recommended thickness of the dried film	80 μm
Reducer	Solvent

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, the steel or galvanized surface should 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 should 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 prefinishing 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 (solvent).

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 control 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 the solvent P-4 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.