



Hammer enamel Defens HAMMER-11(1K)

DEFENS™

Description

A single-component fast-drying hammer enamel modified for better performance in atmospheric conditions.

Purpose and designated area

It is used as a final weather-protecting **general purpose coating** with good gloss and elasticity for painting outside and inside surfaces of steel, concrete, galvanized constructions exposed to environments with an average degree of aggressiveness. Formed coating is resistant to salt water, mineral oils, sunlight.

It is also used for decorative painting of railway rolling stock, containers for road and maritime transportations, metal and reinforced-concrete building constructions, as well as other objects operated under the condition of moderate corrosive attack of the atmospheric environment.

It is recommended to use as a finishing layer on epoxy, polyurethane and alkyd-modified materials.

The service life of the coating is not less than 6 years on condition of appropriate pretreatment and priming of the surface.

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

Specifications

Name of indicator and unit of measurement	Indicator value
Physical form of the coating	Self glossy surface without any impurities, bits and pin holes
Non-volatile matter content, %, not less	50
Conditional viscosity by viscometer VZ-246 with nozzle diameter 4 mm at temperature (20 ⁰ C) , s	from 60 up to 110
Density at temperature (20±0,5) °C, g/cm ³	1,1-1,3
Milling degree, μm, not more	25
Coverage rate of the dries film, kg/m ² , not more	0,110
Drying time up to degree 3 at a temperature (20± 2) °C, hours, not more	1,5
Flexural resistance, mm, not more	1
Impact strength, cm, not less	40
Recommended coating thickness, μm	50-80
Resistance to the static exposure to water at (20,0±2)°C , days, not less	3
Resistance to the static exposure to 3 % sea salt solution at a temperature of (20±2) °C, days, not less	2
Approximate consumption of the enamel on a one-layer coating with a dry film thickness of 50 μm, kg/m ² , (on condition that it is applied by air-less spraying equipment)	0,150
Recommended layer	80 μm
Reducer	xylene

Requirements to the base

Steel and galvanized surfaces. The material is applied to a previously dust-free, degreased, painted or primed in accordance with manufacturer's recommendations steel surface or a prepared (degreased) galvanized surface.

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 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 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 a mixed solvent (solvent, white spirit). When working with enamels at low temperatures, it is recommended to use highly volatile solvents (P-646, P-647). The surface to be painted should be dry and have a temperature of 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 and xylene 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.