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JUB Group

Colours complete your home

TECHNICAL SHEET 06.09-eng
FAÇADE PAINTS

ORGANIC LIME EXTERIOR PAINT

1. Description, Application

The dominant ingredient of the paint is quality slaked lime, which JUB has managed to modify using various additives and suitable processing to the extent that it is possible, contrary to conventionally prepared lime façade paints, to apply ORGANIC LIME FAÇADE PAINT also with a paint roller and not only with a brush or by spraying. During the process of paint production, the main ingredient – slaked lime – maintains all of its typical characteristics so that the paint has a **strong disinfectant effect on wall surfaces – its effect to the surfaces is naturally fungicidal and bactericidal, its coverage is good and it is extremely water-vapour permeable. With additional protection of silicone water repellent agents (JUBOSIL H), it is persistent also in less favourable weather conditions and resistant to the effects of smoke, ultraviolet rays and other atmospheric factors.**

The paint is used mainly **for decorative protection of poorly load-bearing surfaces in old agricultural architecture as well as, in combination with additional water repellent protection, for more demanding treatments of façade surfaces of buildings of architectural heritage in old city centres and castle- and church complexes, where a requirement of use of lime paints is explicitly expressed.** Suitable surfaces also include new – not yet carbonised – or old – already carbonised – fine lime and lime-cement render finishes, and it is also possible to paint the non-plastered brick façade surfaces with it.

ORGANIC LIME FAÇADE PAINT is available only in white. Tinting - only to gentle pastel shades - is possible only by means of some powdery oxide pigments. The process is demanding and not recommended to non-experts.

2. Packaging and Colour Shades

Plastic containers holding 5 litres and plastic containers holding 18 litres:

- White (shade 1001)

3. Technical Data

Density (kg/dm^3)			~1.40
Content of vaporous organic substances (VOC) (g/l)			<20 The EU VOC requirement – category A/c (from 1 January 2010): <40
Drying time T = +20 °C, relative air humidity = 65 % (hours)		Touch dry	4 – 6
		Suitable for further treatment	24
Characteristics of dry colour film	Water vapour permeability EN ISO 7783-2	µ coefficient (-)	<300
		Sd value (d = 150 µm) (m)	<0.03 Class I (high water-vapour permeability)
	Water absorption w_{24} EN 1062-3 ($kg/m^2h^{0,5}$)		1.6 Class I (high water absorption)

	Adhesion to standard lime-cement render (1: 1: 6) EN 24624 (MPa)	>0.40

Main ingredients: slaked lime, fine calcite fillers, cellulose thickening agents, water

4. Surface Preparation

The surface should be solid, dry, and clean – without any badly-adhered particles, dust, remains of panelling oils, fat or other filth.

In normal conditions (T = +20 ºC, relative air humidity = 65 %), dry or mature the newly applied renders for at least a day for each mm of their thickness. In case of paint renovation, thoroughly remove from the surface all old badly-adhered coatings, slurries and other decorative coats, all of which get easily soaked in water. Washing with a high-pressure water blaster (hot water or steam) is especially recommended mainly for very dirty façade surface, and façade surfaces infected with wall algae and mould. Disinfect such surfaces after they are washed.

In the event of potential repairs of façade surfaces that have been damaged in any way, follow only procedures, which assure, concerning roughness, as high a level of equalisation as possible to the repaired surface. By painting, it is not possible to completely eliminate differences in the texture and structure of the surface, since they may usually appear even more visible and bothering after being painted. In normal conditions (T = +20 ºC, relative air humidity = 65 %), let the applied renders and levelling compounds dry or mature for at least 1 day for each mm of their thickness.

Cover a cleaned (any potentially repaired) surface with a suitable primer. Use diluted paint (diluted with maximum 30 % of water) or diluted AKRIL EMULSION (AKRIL EMULSION : water = 1 : 1) and water-diluted SILICONEPRIMER (SILICONEPRIMER : water = 1 : 1) in the case of more demanding buildings or surfaces, which are heavily exposed to precipitation (especially if painted surfaces are going to be additionally hydrophobbed).

Apply the primer with a paint or masonry brush, a long-fibre fur or textile paint roller or spray it. In normal conditions (T = +20 ºC, relative air humidity = 65 %), painting may begin 6 hours after the application of AKRIL EMULSION or SILICONEPRIMER, or 24 hours if diluted paint has been used as a primer.

Approximate or average use (depending on absorption and roughness of the surface):
ORGANIC LIME EXTERIOR PAINT 90 – 110 ml/m^2
AKRIL EMULSION 90 – 100 g/m^2
SILICONEPRIMER 90 – 100 ml/m^2

5. Preparation of Paint

Only stir the paint well before use and, if necessary, thin it with water (up to 10 %) in accordance with consistency corresponding to application technique and conditions. ATTENTION! Paint coverage worsens quickly with diluting!

Tinting is possible only by means of some powdery oxide pigments and only to gentle pastel shades. The process is demanding and not recommended to non-experts.

Equalise the paint needed to coat the finishing wall surface (or, better still: all surfaces, which are painted in the same colour shade) in a container of appropriate size. In the case of large surfaces, where, in such a manner, it is impossible to technically ensure sufficient quantity of paint even for a one-layer application, mix paint from at least three containers in an equalisation container first. When a third of the so prepared paint is used, pour new paint into the container and stir it well together with the rest of the paint already in the container, etc. Equalisation of white paint, which belongs to the same production batch or to the same production date and which has not been diluted, is not necessary.

Reworking the paint during application (adding tinting agents, diluting, and similar) is not allowed. Quantities necessary to paint individual surfaces are calculated or estimated on the basis of the area of these surfaces and data on consumption rate, and, in specific cases, consumption is determined by making measurements on a test surface that is large enough.

6. Paint Application

Apply the paint in two or three coats at intervals of 24 hours (T = +20 ºC, rel. air humidity = 65 %) using a long-fibre fur or textile paint roller (length of hairs or threads is 18 to 20 mm; the following can be used: artificial fur or textile linings made of different synthetic threads – polyamide, dralon, vestan, nylon, perlon or polyester) or a paint brush or by

spraying. When applying the paint with a roller, use a suitable bucket grid.

Spray the paint onto a surface with traditional high pressure and modern low pressure spray guns of different types (with “external” or “internal mixing of air”), as well as with airless aggregates of a variety of manufactures. As regards to the choice of diameter of spraying nozzles and service pressure, follow the producer's instructions. Paint an individual wall surface without interruptions from one corner of the wall to the other. Without prejudice to the before stated, always treat surfaces inaccessible for a standard long-fibre paint roller or a spray gun (corners, gutters, narrow reveal surfaces and similar) first using suitable brushes or smaller paint rollers adjusted to existing conditions.

Painting is possible only in suitable weather or microclimate conditions: the temperature of the air and the wall surface should be between +8 ºC and +35ºC, while the relative air humidity should be up to 80 %. Protect façade surfaces from sun, wind and rainfall using protective scaffold nettings; however, do not conduct any work in rain, fog or strong wind (≥30 km/h) despite such protection.

In normal conditions (T = +20 ºC, relative air humidity = 65 %), resistance of freshly processed surfaces to damage caused by precipitation (washing away of the application) is achieved in 24 hours at the latest.

Approximate or average use for a two-layer application (depending on absorption and roughness of the surface):
ORGANIC LIME EXTERIOR PAINT 220 – 250 ml/m^2

7. Tool Cleaning, Waste Management

Thoroughly clean the tools with water immediately after use.

Keep unused paint (only the one that has not been diluted!) in a well sealed packaging for potential repairs or later use. Do not empty waste remains into drains, watercourses or environment and do not dispose them together with domestic wastes. In accordance with waste management regulations, they are classified among irritant waste with classification number 08 01 19*. As such, they should be disposed only in an organized manner or dumped onto specially adjusted dumping areas.

If they are mixed with cement (hardened mortar remains and wastes, sand or sawdust may be added to them), they (when they harden) can be deposited onto the dumping grounds of construction waste (waste classification number: 17 09 04) or municipal waste (waste classification number: 08 01 12).

Cleaned packaging can be recycled.

8. Safety at Work

The product contains lime and is thus classified among dangerous preparations (indicator of danger: Xi - IRRITANT) – apply it safely, follow special instructions from the technical sheet in addition to general instructions and regulations on safety at construction work or painting works and further instructions stated below.

Warning signs on the packaging	Special measures, warnings and explanations required for safe work
Xi  IRRITANT! THE PRODUCT CONTAINS LIME (CALCIUM HYDROXIDE)!	R36/38 Irritating to eyes and skin. R41 Risk of serious damage to eyes. S2 Keep out of the reach of children. S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of water. S37/39 Wear suitable gloves and eye/face protection. S46 If swallowed, seek medical advice immediately and show this container or label.

9. Maintenance and Restoration of Processed Surfaces

Painted surfaces do not require any special maintenance. Sweep or hoover non-adhered dust and other non-adhered filth.

However, where filth and stains cannot be removed applying the methods described above, renovation painting is recommended. It should include a new two-layer paint application as described in the chapter entitled “Paint Application”. If not more than five years have passed since the last painting, application of primer is usually not necessary at renovation painting.

10. Storage, Transportation Conditions and Durability

Storage and transportation at temperatures between +5℃ and +25℃, protected from direct sunlight, out of the reach of children, IT MUST NOT FREEZE!

Shelf life when stored in an originally sealed and undamaged packaging: at least 12 months.

11. Quality Control

The product’s quality characteristics are determined by the internal manufacturing specifications as well as by the Slovenian, European and other standards. JUB ensures achieving of the declared or set quality level by the ISO 9001 system for total quality management and control, which has been implemented at JUB for many years and which comprises daily quality checks in its own laboratories, occasionally at the ZAG Construction Institute in Ljubljana, at the Forschungsinstitut für Pigmente und Lacke in Stuttgart and other independent expert institutions in Slovenia and abroad. During the manufacturing process, JUB strictly complies with the Slovenian and European standards for protection of the environment and for ensuring security and health at work, which is confirmed by the ISO 14001 and OHSAS 18001 certificates.

12. Other Information

The technical instructions in this brochure are given based on JUB’s experience and are given as a guideline for achieving optimum results. JUB cannot accept any responsibility for the damage caused by incorrect selection of a product, incorrect use or unprofessional work.

This technical sheet supplements and replaces all preceding editions. JUB reserves the right to change and supplement data in the future.

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