

JUB kemična industrija d.o.o. Dol pri Ljubljani 28 SI-1262 Dol pri Ljubljani Slovenija

JUB Group

TECHNICAL SHEET 06.06-eng FAÇADE PAINTS

JUBOSILCOLOR SILICONE (JUBOSIL F)

Silicone façade paint

1. Description, Application

JUBOSILCOLOR SILICONE is a façade paint made on the basis of water dispersion of silicone binders. It is suitable mainly for decorative protection of solid, smooth (polished), or fine and evenly rough façade surfaces having no cracks, structural anomalies, or any other defects, including: at least a month old lime-cement and cement fine renders, at least two-month-old unplastered concrete façade surfaces, fibre-cement and similar façade surfaces, façade brick, and similar. Application is also possible onto well adhered old silicone, silicate, and acrylic paint coats and onto less rough or fine rough decorative renders of all types.

The paint is distinguished by excellent coverage, good water vapour permeability, and high water repellence lasting for a long time. Paint film adheres to the surface well and is resistant to effects of smoke, ultraviolet radiation, and other atmospheric factors; dust and other filth do not adhere to the paint film well - therefore it is persistent in any climatic conditions including on façade surfaces of tall buildings, which are extremely exposed to precipitation and have minimum projecting roofs.

2. Packaging, Paints

Plastic containers holding 5 liters and plastic containers holding 16 liters:

- 230 paints from the JUB colour chart (on JUMIX tinting stations at points of sale).
- 864 paints from the NCS colour chart (on JUMIX tinting stations at points of sale),
- Delivery of paints designed at a special request of the customer is possible under certain conditions.

Paints of various shades can be mixed in optional ratios!

3. Technical Data

Density (kg/dm³)			~1.50
Content of vaporous organic substances (VOS) (g/l)			<6 The EU VOC requirement – category A/c (from 1 January 2010): <40
Dry to recoat T = +20 °C, relative air humidity = 65		Touch dry	~3
% (hours)		Suitable for further treatment	~6
Characteristics of dry paint film	Vapour permeability EN ISO 7783-2	μ coefficient (-)	<350
		Sd value (d = 100 μm) (m)	<0.04 class I (high water-vapour permeability)
	Water absorption W24 EN 1062-3 (kg/m ² h ^{0,5})		<0.06 Class III (low water absorption)
	Grasp to standard lime-cement render (1: 1: 6) EN 24624 (MPa)		>0.5
	Gloss		Matt





Main ingidients: silicone and styrene-acrylate binder, fine calcite and alumo-silicate fillers, titanium dioxide, cellulose thickener, water

4. Surface Preparation

Surface should be solid, dry, and clean - without any badly-adhered particles, dust, remains of panelling oils, fat, or other dirt.

In normal conditions (T = +20 °C, relative air humidity = 65 %), let the newly applied renders and levelling compounds dry or mature for at least 1 day for each mm of their thickness. Concrete surfaces should dry for at least a month. In case of paint renovation, thoroughly remove from the surface all old badly-adhered paints, precoats, and other decorative coats, all of which get easily soaked in water. Washing with a jet of hot water or steam is recommended mainly for very dirty façade surfaces, all concrete surfaces, and façade surfaces infected with wall algae and mould. Disinfect such surfaces after washing.

In the event of potential mending of façade surfaces that have been damaged in any way, follow only procedures, which ensure, concerning roughness, as high a level of equalisation as possible to the mended surface.

Application of a primer is obligatory before the first as well as before renovation paintings. JUB suggests SILICONEPRIMER diluted with water (SILICONEPRIMER: water = 1:1), JUKOL diluted with water (JUKOL: water = 1:1) or even the paint diluted with water (JUBOSILCOLOR SILICONE: water = 1:1). All of them are applied with a paint or masonry brush, a long-bristle fur or textile paint roller, and they can also be sprayed.

In normal conditions (T = \pm 20 °C, relative air humidity = 65 %), painting may begin 6 hours after the application of a primer.

Indicative or average use (depending on absorption and roughness of the surface):

SILICONEPRIMER 90 – 100 ml/m²

or

90 – 100 ml/m²

or

JUKOL

JUBOSILCOLOR SILICONE 90 – 120 ml/m²

5. Paint Preparation

Only stir the paint well before use and, if necessary, thin it with water (maximum 10 %) in accordance with consistency corresponding to application technique and conditions.

Equalize paint needed to coat the finishing wall surface (or, better still: all surfaces, which are painted in the same paint shade) in a container of appropriate size. In 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 of the same production batch, which has not been diluted, is not necessary.

Any "repairs" of the paint during application (adding tinting agents, diluting, and similar) are not allowed. The quantity of paint required to paint specific surface can be calculated or estimated from the surface and data on average consumption. In specific cases, the consumption can be determined by measuring at large enough test surface.

6. Paint Application

Paint is applied in two (exceptionally three) coats using a long-bristle fur or textile paint roller (length of hairs or threads is 18 to 20 mm; the following can be used: natural and artificial fur or textile linings made of different synthetic threads – polyamide, dralon, vestan, nylon, perlon or polyester), a painting brush suitable for application of dispersion wall paints or it can be sprayed.

Use a suitable bucket grid when applying the paint with a roller; the second or the third application can be applied only onto a completely dry previous coat – in normal conditions (T = +20 °C, relative air humidity = 65 %) it is usually after approximately 6 hours (in case of lower temperatures and high relative air humidity drying time can be substantially extended!).

Paint can be sprayed onto a surface using traditional high pressure and modern low pressure spray guns of different types (with "external" or "internal mixing of air"), as well as airless aggregates of a variety of manufactures. As regards to the choice of diameter of spraying nozzles and service pressure, follow producer's instructions.



An individual wall surface is painted without interruptions from one end to the other. Regardless of the before stated, always treat surfaces inaccessible to a standard long-bristle paint roller (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: temperature of the air and the wall surface should not be lower than +5 °C and not higher than +35 °C and relative air humidity should not be higher than 80 %. Protect façade surfaces against the sun, wind and rainfall with curtains; however, do not conduct any work in rain, fog or strong wind (≥30 km/h) despite such protection.

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

Approximate or average consumption for a two-coat application:

180 - 210 ml/m2, depending on absorption and roughness of the surface

7. Tool Cleaning, Waste Management

Thoroughly clean all the tools with water immediately; dried stains cannot be removed.

Keep unused paint (only that, which has not been diluted!) in a well sealed package for potential repairs or later use. Waste liquid remains must not be emptied into drains, watercourses, or environment and they must not be disposed together with domestic wastes. Mix them with cement (hardened mortar remains and wastes, sand or sawdust may be added to them) and when they harden, deposit them 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

Respiratory protection with a protective mask and eye protection with protective glasses or a face shield is necessary only when paint is applied by spraying, otherwise follow general instructions and regulations on safety of construction work or works including paintwork. The use of special personal protection means and the application of special measures for safe work at paint application with a paint roller or a brush is not necessary.

In case of contact with eyes, rinse with water immediately.

9. Maintenance and Restoration of Painted Surfaces

Painted façade surfaces do not require any special maintenance. The non-adhering dust and other non-adhering filth can be swept, vacuumed or washed away with water. Adhering dust and more obstinate stains can be removed by light rubbing with a wet cloth or brush soaked into a solution of usual universal household preparations and washed away by clean water.

However, paint should be restored on surfaces, which cannot be cleaned of filth and stains by following the method described above. In such cases, apply two coats of paint as described in the chapter »Paint Application«. An appropriate primer is mandatory, which can be skipped only if the last painting was conducted not more than two years ago.

10. Storage, Transportation Conditions and Durability

Storage and transportation at temperature +5°C to +25°C, protected from the direct sunlight, out of re ach of children, MUST NOT FREEZE!

Durability when stored in originally sealed and undamaged packaging: at least 18 months.

11. Quality Control

The product's quality characteristics are determined with the internal manufacturing specifications as well as with the Slovenian, European and other standards. The achievement of declared or set quality level is ensured by the ISO 9001 system for total quality management and control, which has been implemented at JUB for many years. It comprises daily quality checks in our own labs, and occasionally also at the Construction Institute in Ljubljana, at Forschungsinstitut für Pigmente und Lacke in Stuttgart and at other independent institutions at home and abroad. During the manufacturing process, we strictly comply 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

Technical instructions in this brochure are given based on our experiences and are given as a guideline for achieving optimal results. We cannot take any responsibility for the damage, caused by incorrect selection of a product, incorrect use or unprofessional work.

A paint may differ from the imprint in the colour chart or from the certified sample, and the total paint difference ΔΕ2000 - it is defined in accordance with ISO 7724/1-3 and the CIE DE2000 mathematical model -amounts to maximum 1.5. If you wish to check the paint shade, the correctly dried paint application on a test surface and a standard of the concerned paint, which is stored in the TRC JUB d.o.o., are applicable. The best possible approximation for available JUB's bases and tinting pastes is a paint made in accordance with other colour charts, therefore total paint discrepancy from the desired paint may also be greater than the above stated guaranteed values. Difference in paint, which is a result of inadequate working conditions, of paint preparation, which does not follow instructions from this technical sheet, of non-compliance with equalisation rules, and of application of the paint onto inadequately prepared surface and onto a wet or not dry enough surface, cannot be subject of complaint.

For painting façade surfaces, in particular final façade thermal insulation systems, we recommend paint with brightness (Y) over 25. In more difficult exploitation conditions, darker paints and paints of intensive colour shades are less persistent, less resistant to being washed out by drainage water, and more susceptible to chalking. We shall not accept complaints for changes, which might occur for this reason on façade surfaces which pale faster. Therefore, one should consult our experts for each case individually regarding conditions for application of such paints and maintenance of processed surfaces. The list of colour nuances, which could be controversial in this sense, is available at stores where JUMIX tinting stations are located as well as in our sales and technical information departments.

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

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