

TECHNICAL SHEET 10.04.03-EN



NANOCOLOR

Self-cleaning silicone micro-reinforced façade paint

1. Description, Application

NANOCOLOR is a micro-reinforced façade paint with self-cleaning effect based on water dispersion of silicone binders. It is suitable for decorative protection of all types of solid, embossed or rough and smoothed or fine rough façade surfaces (at least a month old lime-cement and cement render finishes, at least a month old unplastered concrete façade surfaces, fibre-cement and similar façade boards and similar). The paint film is additionally reinforced with thin synthetic fibres, so that it does not crack on spots of too-thick applications in furrows, channels and holes. Application is also possible to well adhered old acrylic, silicate and silicone paint coats and decorative render finishes of all types.

Key components, manufactured according to the latest results of nano technology, ensure the paint high resistance to effects of smoke, ultraviolet radiation and other atmospheric factors and consequently good stability in any climatic conditions including on façade surfaces which are extremely exposed to precipitation.

In addition to the aforementioned characteristics, the paint is also distinguished by good coverage and very good water vapour permeability.

2. Colour Shades

- white (colour shade 1001)
- color shades according to the color chart JUB Favorite Feelings C-G *
- delivery in colour shades designed at a special request of a customer is possible under certain conditions

Paints of various colour shades can be mixed in optional ratios.

3. Technical data

Packaging	15l
Density	~1.637 kg/dm ³
Content of vaporous substance (VOC)	20 g/l
The EU VOC requirement - category	A/c<40

Water dilution mass		10%	
Water dilution volume		16%	
Drying time T = +20 °C, relative air humidity = 65 %	Touch dry	3h	
	Suitable for further treatment	6h	
Consumption		300-700 ml/m ² (for a two-coat application)	
Recommended number of layers		2	
Characteristics of a dry paint film	Vapor permeability EN ISO 7783-2	μ, coefficient	<500
		value Sd (d = 100 μm)	<0.08 m class 1 (high water vapour permeability)
	Water absorption w24 (EN 1062-3)		<0.03 kg/m ² h ^{0,5}
	Water absorption class		W3 - class 3 (Low)
	Adhesion to conventional lime-cement (EN 1542)		>0.5 MPa
	Adhesion to polished concrete (C25/30)		>2.1
Appearance		mat	

4. Installation Conditions

Temperature of the air and the wall surface should not be lower than +5 °C and not higher than +30 °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.

5. Surface Preparation

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

Drying time of new renders and levelling compounds in normal conditions (T = +20 °C, relative air humidity = 65 %) is at least 1 day for each mm of thickness,

while for concrete surfaces the drying time is at least one month. 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.

The application of primer is mandatory, both prior to first painting as well as prior to renovation painting. We recommend water-diluted SILICONE Primer (in ratio 1:1) or water-diluted JUKOL Primer (in ratio 1:1) or NANOCOLOR paint diluted with water (in ratio 1:1).

If the surface is hair-cracked, cover it with REVITAL Primer once or twice. Mix it well before use and, if necessary, dilute up to 5% with water.

For technical information on these primers, please read the technical data sheet.

6. Preparation of Paint

Only stir the paint well before use and, if necessary, dilute it with water in accordance with consistency corresponding to application technique and conditions (see table above).

The color of the same shade, which is used to paint larger areas is equalized in a sufficiently large container from at least three buckets, when one third of the equalized color is used, a new color is added to the container and it is equalized with the rest of the color from before. White tinting is not required.

Any “repairs” of the paint during application (adding tinting agents, diluting, and similar) are not allowed.

7. Paint Application

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

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 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 (corners, gutters, narrow reveal surfaces and similar) first using suitable brushes or smaller paint rollers adjusted to existing conditions. 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.

Thoroughly clean the tools with water immediately after use.

8. 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 by water. Adhering dust and more obstinate stains can be removed by light rubbing with a wet cloth or sponge soaked into a solution of usual universal household preparations and washed away by clean water.

Restore paint on surfaces, which cannot be cleaned of filth and stains in the above described manner. Restoration painting should include a new two-layer paint application as described in the chapter entitled “Paint application”. Always apply adequate primer. It is possible to apply paint directly onto a surface only in case no more than two years have elapsed since the last painting.

9. Storage, Transportation Conditions and Durability

Storage and transportation at temperature +5°C to + 25°C, protected from the direct sunlight, out of reach of children, **MUST NOT FREEZE!** Durability when stored in originally sealed and undamaged packaging: at least 18 months.

10. Other Information

Technical instructions 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. JUB also bears no responsibility in cases where the substrate for the application of our products is prepared inadequately or with materials of inadequate quality from other manufacturers. In the case of applying our products to existing substrates of old coatings or pre-prepared substrates with materials from other manufacturers, it is obligatory to make appropriate test fields with all the intended applications of JUB products, in accordance with the technical instructions, before starting the work.

Safety measures: Follow the instructions on the safety data sheet of the product.

The colour shade may differ from the print in the colour chart or from the approved sample. However, the total colour difference ΔE_{2000} – it is determined in accordance with the ISO 7724/1-3 and by a mathematical model CIE DE2000 – doesn't exceed 1.5 for colour shades from the JUB FAVOURITE FEELINGS colour chart or 2.5 for nuances from the NCS and RAL colour charts. If you wish to check the colour shade, dry the application of a render on a test surface correctly and check a standard of the concerned shade, which is stored in TRC JUB. Paint manufactured by other colour charts is the best possible approximation for JUB's primers and tinting agents.

Therefore, in such cases the total colour difference from the desired nuance may be even higher than the value guaranteed above. Difference in colour shade, which is a result of unsuitable working conditions, of a colour preparation technique, which differs from the one in this technical sheet, failure to follow the equalization rules, application of the compound onto an unsuitably prepared, overly or not enough absorbing surface, more or less coarse surface, on wet or not dried enough surface, cannot be subject of complaint. For application to façade surfaces, we recommend paint with brightness (Y) over 25. Darker paints and paints of intensives colour tones, which can be achieved only with organic pigments, are somewhat less resistant to washing out with precipitation and more inclined to chalking in more demanding exploitation conditions. 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 shades, 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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