

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

**JUB Group** 

**TECHNICAL SHEET 06.08-eng** FAÇADE PAINTS

# REVITALCOLOR SILICATE (REVITALCOLOR SI)

Micro-reinforced silicate façade paint

# 1. Description, Application

REVITALCOLOR SILICATE is a micro-reinforced façade paint based on potash water glass. It is suitable for decorative protection of solid, embossed or rough and fine smoothed or fine rough, also repaired and, with regard to roughness, non-equalised mineral façade surfaces (at least a month old lime or lime-cement render finishes). The paint film reinforced with thin synthetic fibres does not crack on spots of too-thick applications in furrows, channels and holes, and it also fills well hair-cracks, i.e. cracks up to 0.3 mm wide. Application is also possible to well adhered old silicate paint coats and on mineral and silicate decorative render finishes.

REVITALCOLOR SILICATE binds chemically onto the surface and it is distinguished by excellent coverage and good water vapour permeability. The paint film is resistant to effects of smoke, ultraviolet radiation and other atmospheric factors; it is resistant in any climatic conditions.

# 2. Packaging, Paints

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

- White (shade 1001)
- 231 shades from the JUB colour chart (on JUMIX tinting stations at points of sale)
- Under certain conditions, delivery of paints designed at a special request of the customer is also possible.

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)			<25 The EU VOC requirement – category A/c (from 1 January 2010): <40
Dry to recoat T = +20 °C, relative air humidity = 65 % (hours)		Touch dry	4 to 6
		Suitable for further treatment	>12
Characteristics of dry paint film	Vapour permeability EN ISO 7783-2	μ coefficient (-)	<800
		Sd value (d = 150 μm) (m)	<0.12 Class I (high water-vapour permeability)
	Water absorption w24 EN 1062-3 (kg/m²h <sup>0,5</sup> )		<0.10 Class III (low water absorption)
	Grasp to standard lime-cement render (1: 1: 6) EN 24624 (MPa)		>0.5
	Gloss		Matt





Main ingredients: potash water glass + styrene-acrylate binder, fine calcite and alumosilicate fillers, synthetic microfibres, titanium dioxide, cellulose and xanthan gum thickening agent, water.

#### 4. Surface Preparation

In normal conditions (T = +20 °C, relative air humidity = 65 %), dry or mature the newly applied renders and levelling compounds 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 ensure, concerning roughness, as high a level of equalisation as possible to the repaired surface.

The application of a primer is obligatory prior to first painting as well as for renovation painting. We recommend water-diluted SILICATEPRIMER (SILICATEPRIMER: water = 1:1) or simply water-diluted paint (REVITALCOLOR SILICATE: water = 1:1). Apply the primer with a paint or masonry brush or a long-fibre fur or textile paint roller (SILICATEPRIMER can also be sprayed).

If the surface is hair-cracked, cover it with REVITALPRIMER once or twice. Stir the paint well before use, and, if necessary, dilute it with SILICATEPRIMER up to 10 %. Apply the paint with a paint- or masonry brush.

In normal conditions (T = +20 °C, relative air humidity = 65 %), painting may begin 12 hours after the application of a primer.

Approximate or average consumption (depending on absorption and roughness of the surface):

SILICATEPRIMER 90 – 100 ml/m<sup>2</sup>

or

REVITALCOLOR SILICATE 100 – 120 ml/m<sup>2</sup>

or

REVITALPRIMER ~300 ml/m<sup>2</sup>

#### 5. Paint Preparation

Only stir the paint well before use and, if necessary, thin it with SILICATEPRIMER (up to 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

Apply the paint in two (exceptionally in three) coats 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 – vestan, dralon, nylon, perlon or polyester) or a paint brush suitable for applying dispersion wall paints.

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 12 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.

Painting is possible only in suitable weather or microclimate conditions: temperature of the air and the wall surface



should not be lower than +8  ${}_{5}$ C and not higher than +30  ${}_{5}$ 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 ( ${\geq}30$  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

ATTENTION! Prior to applying silicate coats, protect well window and door frames, window sills, as well as window glasses and other exposed surfaces, since stains cannot be removed.

Thoroughly clean the tools with water immediately after use.

Keep unused paint 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. 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

The product contains potash water glass, which irritates eyes and skin, therefore use suitable protective means while working. In addition to general instructions and regulations on safety at works including construction and painting, as well as instructions from the safety sheet, follow also the following warnings:

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S2 Keep out of the reach of children.

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.

S29 Do not empty into drains.

S46 If swallowed, seek medical advice immediately and show this container or label.

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

# 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 12 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.

The colour shade may differ from the print in the colour chart or from the approved sample. However, the total colour difference  $\Delta$ E2000 for shades from the JUB's colour chart – it is determined in accordance with the ISO 7724/1-3 and by the mathematical model CIE DE2000 - doesn't exceed 1.5. A correctly dried application of paint to the test surface and a standard of the concerned colour, which is stored at TRC JUB d.o.o., shall be decisive for control purposes. Paint manufactured by other samplers and colour charts is the best possible approximation for the JUB's primers and tinting agents. Therefore, in such cases the total colour difference from the desired shade 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 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 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.

Denomination and date of publishing: TRC-058/10-gru-tor, 24.01.2010

JUB kemična industrija d.o.o., Dol pri Ljubljani 28, 1262 Dol pri Ljubljani, SLOVENIA Phone: (01) 588 41 00 Main Reception Desk, (01) 588 42 17 Sales Department, (01) 588 42 18 or 080/15 56 Technical Support Fax: (01) 588 42 50 Sales department e-mail: jub.info@jub.si Web page: www.jub.eu







