

TECHNICAL DATA SHEET	Issue: 2	Version: 0
BK-MICROFAS SILICAT	RZ-TLP-054	Date: 24.12.2021.

1. PRODUCT AND COMPANY INFORMATION

Commercial product name: BK-MicroFas Silicat

Manufacturer:

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2. DESCRIPTION, FIELD OF APPLICATION

BK-Micro Fas Silicat is a high-quality polymer emulsion structural silicate-based facade dispersion paint with microfibers. It is characterized by excellent waterproof abilities, good vapor permeability, and good coverage. It is also very resistant to UV radiation and weather. It can be used for the decorative protection of new facades, as well as painting over quality facades, bearing walls, and old facade walls. It is used for painting critical surfaces in combination with the BK-Grund Silicat primer because it has the ability to fill in and bridge thin cracks in the surface layer (crack width maximum 0.5 mm).

It is considered an environmentally friendly wall paint not harmful to human health or the environment. It does not contain organic solvents.

3. COMPOSITION

Chemical composition: Potassium silicate, aqueous polymer emulsion, water, microfibers, additives, pigments, mineral fillers.

Hazardous substances: In accordance with the (EC) Regulation No. 1272/2008 on classification, labelling and packaging of substances and mixtures, through which the CLP/GHS classification and labeling system was introduced into law, this product is not classified as a hazardous product.

Note: The product is alkaline. It may irritate the eyes or skin. In the case of contact with eyes or skin rinse thoroughly with water.

4. TECHNICAL CHARACTERISTICS

Density, g/dm³ (EN ISO 2811-1)	1,500-1,700
Adhesion to the surface, MPa (EN ISO 4624)	≥ 0.5

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Water absorption, kg/, (m² h^{0,5}) (EN 1062-3)	0,1-0,5 (class W ₂ according to EN 1062-1)
Vapor permeability m (EN ISO 7783-2)	< 0,14 (class V ₁ according to EN 1062-1)
Particle size μm (EN ISO 1524)	< 300 (S ₂ according to EN 1062-1)
Layer thickness μm (EN ISO 3233)	100-200 (class E ₃ according to EN 1062-1)
Gloss % (EN ISO 2813)	< 5 at angle 85° (deep mat according to EN 13300)
Viscosity, mPas (EN ISO 2555)	25,000-35,000
Indicative consumption, g/m²	~400-450
Packaging, kg	5; 8; 25;

5. OTHER CHARACTERISTICS

Physical appearance: White or colored viscous liquid

Odor: Specific of the polymer binder/silicate compound

pH value (EN ISO 787-9): 11-12

Dry matter content (EN ISO 3251), %: ~70

VOC* content, g/l: < 1 (maximum allowed value A (c) 40 g/l)

*VOC: Volatile Organic Compound;

Possibility of choosing shades according to Bekament's color charts with a limited selection of colors. We do not guarantee a complete match according to the color charts of other manufacturers, nor do we guarantee absolute repeatability of shades.

6. SURFACE PREPARATION

The surface to which the paint is applied must be firm, clean, and dry, without poorly bound parts, greasy stains, etc. Appropriate surface are following : lime, cement, and cement-lime mortars (at least one month old), concrete surfaces (at least one month old), surfaces smoothed out with quality leveling masses (the age depends on the type), as well as surfaces with old mortars or mineral-based paints which have taken on solid hold, etc. Before applying, the surface must be coated using the BK-Grund Silicat primer, preferably in the same color of the dispersion paint. The primer must be left to dry before applying the paint for at least 12 hours.

In the case of painting surfaces infected with wall mold, it is necessary to disinfect with BK-Sanucid. In case of painting surface which have been previously treated with oil-based paints, varnishes, etc, a complete removal of all existing spreads must be performed.

Great care should be given to preparing the surface, especially when it comes to painting over damaged facades. Any irregularities in the surface texture will prevent a satisfactory

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result to be achieved. Most of the time, irregularities become even more visible after being painted over.

7. PREPARATION AND APPLICATION

The mass must be stirred before use and homogenize materials from different batches and / or packages. After that, dilute the mass as needed with about 5- 10 % of water (0,25-0,5 l for a package of 5 kg, 0,4-0,8 l for a package of 8 kg, 1,25-2,5 l for a package of 25 kg). The paint is applied using a long-haired roller, most often in two layers. Application of the second layer is done after the first layer is completely dry. In normal conditions (T=+23-25 °C, relative humidity=50-60 %), this takes 4-6 hours.

Work must be even and without interruptions in continuous wall surfaces so as to avoid any irregularities created due to the adhesion of surfaces, irregular drying, etc. When applying the product onto large facade surfaces, roller used to conduct the work must always contain paint on it. This is done in such a manner that the roller is run across the surface multiple times in different directions in order to avoid grouping the filler in one spot only. Large facade surfaces that also have multiple floors must be painted at the same time on all levels.

Air and surface temperature during installation should be in the +15 °C to +30 °C range, while the relative humidity must not be greater than 70%. Do not work under direct sunlight, wind, or rain. After 4 h of drying under normal conditions (T = + 23-25 °C, 50-60% r.v.v.) the paint is dry to the touch, while the complete resistance of the material is achieved after 3 weeks. BK-MicroFas Silicat requires at least 24 hours to achieve total resistance to rainfall in normal conditions. High moisture and low temperatures may significantly lengthen the drying time and cause the mass to not be uniform.

When applying the BK-MicroFas Silicat it is necessary to protect the surfaces using safety curtains, regardless of weather, in order to ensure the coating to dry off evenly and to prevent the appearance of stains.

8. MAINTENANCE

Surfaces painted over using BK-MicroFas Silicat are resistant to wear and tear and does not require any particular maintenance. It is recommended that the surface is occasionally dusted off. Any possible impurities may be removed using warm water and a universal house cleaning supply (laundry detergent/dish soap). After that, rinse the surface using clean water. No cleaning or washing using abrasive products or tools is permitted. Silicate paints, due to their high pH value, are extremely resistant to microorganisms. As a preventative measure however, you must abide by the recommendations dealing with regular facade maintenance.

Regular maintenance of facade surfaces also reduces the risk of appearance of algae and fungi. Appearance of microorganisms is characteristic of thermal insulation systems. This mainly happens on objects close to trees, rivers, lakes, in areas with frequent periods of fog and higher humidity, in valleys, etc. Objects which are in direct contact with soil saturated with moisture or dries slower, objects with shorter roofs, all objects where works around openings were poorly done, etc. are all at risk. Western and northern sides of the object are the ones under most stress.

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Some measures of suppressing/reducing the risk of microorganisms developing are cleaning the facade surfaces on a regular basis, removing surface waters around the object, cleaning the snow, controlling drainage around the object, cleaning gutters, etc. Remediation of infected surfaces is not only performed on surfaces where microorganisms are visible; the entire wall is treated. Treatment should be performed according to the instructions listed in the Technical Data Sheet for BK-Sani Cid. Upon the removal of microorganisms, treated surfaces must be painted over using facade paint with the addition of a biocidal product for the protection of dry film. Regardless of the adequate function of the biocidal product, there is no guarantee that the microorganisms will not reappear after a certain period of time. Special emphasis needs to be placed on the fact that the appearance of microorganisms cannot be fully prevented; it can only be slowed down. The effect of the biocidal product wanes off during time. Objects located in conditions which make them susceptible to the development of microorganisms must be regularly maintained and periodically painted over in the previously described manner. It is common that spiders and insects gather on the surface of thermal insulation systems. This is considered as soiling. The abovementioned regular maintenance is a preventative measure in this case, too. In the end, it is necessary to point out that the appearance of microorganisms, spiders, insects, etc. on facades is purely an aesthetic problem, not a functional one. As such, it may not serve as a basis of claims regarding the quality of the thermal insulation system.

9. CLEANING THE TOOLS

All tools must be thoroughly washed using water immediately after use. If the tools are not washed immediately after use, remove the hardened residue mechanically. Removal may be easier if the tools are submerged in water over a period of several hours.

10. HANDLING AND STORAGE

No special caution during use is needed when using the product properly. Keep out of reach of children.

Store at temperatures between +5 ° C and +25 ° C, protected from direct sunlight and frost.

Shelf life: 12 months.

11. PERSONAL PROTECTION

Respiratory tract protection: Not needed when the rooms are well aerated.

Hands and body protection: When the skin is repeatedly exposed to the mass, a preventative use of protection gloves is recommended. Use long-sleeve work overalls.

Eye protection: Use safety goggles as a preventative measure.

12. ECOTOXICOLOGICAL INFORMATION

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Based on experiences and information currently available, no negative health effects are known when the product is used appropriately. Prevent uncontrolled discharge into sewage and waterways.

13. STORAGE

In accordance with local/regional/European/national regulations.

14. OTHER INFORMATION

The color chart was printed on paper. While applying the product onto various surfaces, certain smaller deviations from the color chart may be expected. These deviations are not subject to claims. Certain deviations of the paint in relation to the appropriate shade in the color chart are possible due to the use of natural mineral fillers. The uneven color shading of a facade surface painted over may be the consequence of inappropriate conditions at installation, differences in absorption, and the roughness of the base.

All paint for a single object must be ordered at one time. Banja Komerc Bekament DOO does not guarantee a complete match of shades from various batches. Deviations in terms of tone are not subject to claims.

If the contractor notices an aesthetic or application deficiency while using the material, he is obliged to cease the works and notify the manufacturer of this. The manufacturer will consider the claim in the shortest possible time frame. Complaints to the manufacturer upon using a significant portion or the entire amount of the materials are not subject to claims.

While choosing the shade to be installed into the thermal insulation system, we recommend shades with luminous intensity Y above 30. Colors of intense shades, are less resistant to wash out due to rainfall. They are also less likely to maintain their color consistency over extended period of time. Changes in facade surfaces which occur due to external factors cannot be the object of claims.

15. NOTE

Banja Komerc Bekament DOO performs product quality checks using its own laboratories. It also occasionally tests its products in independent certified laboratories. Product Data Sheet is the product of our knowledge and practical experience. The purpose of the Data Sheet is to serve as a recommendation in order to achieve the best possible results. If weather and other conditions are different than those described in our instructions, our instructions need to be taken as general guidelines, without an installation warranty.

Banja Komerc Bekament DOO assumes no liability for damages resulting from the improper use or incorrect product selection, as well as for poorly executed work. It is assumed that the contractor has mastered the techniques of installing and use of various products.

Matters written herein bind us in no way.

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This document replaces all previous versions, which as of the above date of making of this one are considered invalid.

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Amended chapters: 1