



**High Solar Reflective
Sol - Silicate
Emulsion coating
for building's
masonry walls**

Energy Savings
Thermal Comfort
Aesthetic Superiority
Extreme Durability

ACTIVE Sil

**For Building's Facades
and Historic Buildings Restoration**



www.abolinco.com

High solar reflective coating which noticeably combines thermal comfort conditions with the reduction of energy and money consumption.

Architects traditionally have recognized that reflective building colors can reduce building thermal loads. Many current references equate 'cool roofing' and "cool exterior walls" with whites. Certainly whites are good reflectors of the sun's heat. However, offering any color as long as it's White is not always the most viable design strategy.

Fortunately, COOL BARRIER & ACTIVE SIL technology allows for the design of products that remain cool under the sun – without sacrificing color. The offered technology is characterised by high solar reflectance and high infrared emittance values.

Better Facades Start Here!

The facade is your building's visiting card, and it will make a bad impression if it is dirty or damaged. The building will also depreciate, because the damage will impair the building fabric. That's why it is better to eliminate a facade's "natural" enemies, such as water, UV rays and air pollution, from the outset. Only coatings finely tuned to the respective substrate fend off harmful external influences and afford valuable building components lasting protection. Moreover Active Sil is provided with special nanostructured photocatalytic active ingredients which perform excellent mould and algae resistance while preserves the aesthetic identity of heritage buildings

Active Sil

A special combination of organic/inorganic - emulsion/waterglass and nanostructured silica binders provides a highly water vapour permeable masonry wall paint, with extreme durability, suitable for interior and exterior application. Active Sil is suitable for coating mineral renders/ plasters and for renovation of sound, adherent silicate paints, matt dispersion/emulsion paints, synthetic resin renders/plasters and intact external thermal insulation composite systems (ETICS/EWI systems). Highly recommended in Historic buildings renovation works.

ACTIVE SIL TECHNOLOGY Enhance Quality of Life

Special Characteristics

- ✓ Saves energy by reducing the needs for cooling
- ✓ Creates thermal comfort conditions
- ✓ Breathable
- ✓ Algae, mould and fungi resistant
- ✓ Suitable in Historic buildings renovations works
- ✓ Environmentally friendly
- ✓ Interior – Exterior use

Properties

- texture-retaining
- very good hiding power
- water-resistant
- very high CO₂ and water vapour permeability
- high colour stability for a silicate paint
- without film preservatives is against algae and/or fungal attack

Classification EN 1062-1

Technical data	Standard / test regulation	Value/ Unit	Notes
Density		1.45 -1,50 g/cm ³	
Water permeability	EN 1062-1	W=0,058Kg/m ² h ^{0,5}	W3
Vapor Transmission Rate	EN ISO 7783-2	Sd= 0,0636	V1
Dry layer thickness	EN 1062-1	200 µm	E3 > 100; ≤ 200
Grain size	EN 1062-1	< 100 µm	S1 fine
Gloss	EN 1062-1	matt	G3
The characteristic values stated are average values or approx. values. We use natural raw materials in our products, which mean that the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended purpose.			

Substrate

Requirements: The substrate must be firm, dry, clean and load-bearing, as well as free from sinter layers, efflorescence and release agents. Damp or not fully cured substrates can lead to defects in subsequent coats, such as blistering or cracks.

Preparations: Check existing coatings for their load-bearing capacity. Remove any non-load-bearing or structurally weak coatings.

Application

Application temperature: Lowest temperature of substrate/air: +8°C. Highest temperature of substrate/air: +30°C

Material preparation

Intermediate coating diluted with max. 10 % water.

Top coat diluted with max. 10 % water.

Use as little water as possible to achieve application consistency. Stir well before application. For machine application the amount of water added depends on the requirement of the respective machine/pump. As a rule, strong colour shades need less water to achieve the optimum application consistency. Too much thinning of the material will make application more difficult and will result in poorer characteristics (e.g. hiding power, colour shade).

Consumption

Approx. consumption per paint coat: 0.15 - 0.20 l/m²

Approx. consumption for 2 coats: 0.30 - 0.40 l/m²

The consumption of the material depends on the application method, substrate and consistency, amongst other factors. The stated consumption rate is only to be used as a guide. Where required, precise consumption values should be established on the respective project.

Coating procedure

Substrate coating: Depends on the type and condition of the substrate.

Primer coating: Cool Barrier Grip Sil

Intermediate Coating: Active Sil

Top coat: Active Sil

Application

Painting, Rollers, Airless spray-gun

Drying, curing, reworking time

When there is high humidity and/or low temperatures, the drying process will be delayed accordingly. During unfavourable weather conditions it is imperative that suitable protective measures (e.g. protection against rain) be applied to the work in progress and freshly completed facades. Successive coats may be applied after 8 hours when the air and foundation/base temperature is of about +20 °C and the humidity level is of 65 %.

Cleaning the tools

Clean tools with water immediately after use.

Delivery

Colour shade White, Limited tintability in accordance with the Abolin Facade Colour System

Colour stability:

The effects of the weather, humidity, UV irradiation and deposits can lead to changes in the coating surface over time. This can result in colour changes. This is a dynamic process which varies according to climate conditions and the degree of exposure. The respective current national regulations, data sheets, etc. apply.

Filler break: When coated surfaces are exposed to mechanical stress it is possible that, due to the natural calibration grains used for darker, more intense colour shades, the areas of impact change to a lighter colour. This does not affect the quality and functionality of the product.

Colour accuracy: It is not possible to give any warranty for uniform colour accuracy and freedom from stains due to chemical and/or physical curing processes and fluctuations in the weather and different substrate conditions, especially in the case of: a) uneven absorption behaviour of the substrate b) different substrate moistures over the entire the surface c) partially very different alkalinity/substances from the substrate d) direct solar radiation with sharply delineated shadowing on the freshly applied coating.

Special options possible: The product is free of film conservation. It is not possible to add agents against algae and mould growth. If the project to be coated is subject to a higher risk of algae and mould attack, we recommend the use of facade paint with adjusted film conversation which provide increased protection against algae and fungal attack. However, it is not possible to guarantee that there will be no algae and/or fungal attack in the long term.

Packaging

18 lit Pail

Storage: Store tightly sealed in frost-free conditions. Protect against heat and direct sunlight.

Storage life: The quality of the original package is guaranteed until stock by date. The stock by date can be deduced from the batch number of the package.

Composition Notes

In accordance with VdL (German Paint and Printing Ink Association) guideline: Construction coating materials for buildings, potassium silicate, Polymer dispersion, Titanium dioxide, Mineral filler material, Silicate fillers, Water, Aliphatics, Glycol ether, Additive.

Further Details and Safety During Use: Before use, see Material Safety Data Sheet (MSDS).

LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Coatings products made by Abolin Co, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

Abolin Co has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Abolin Co Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development. This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product. The English text of this document shall prevail over any translation thereof.

The management system has been certified according to EN ISO 9001

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