

Funcosil® AGO



Article No. 0685

Environmentally correct, water based, semi-permanent impregnation agent for graffiti protection.

Property profile:

Funcosil® AGO is a water based, milky, clear drying impregnation. After application, Funcosil® AGO deposits on capillary and pore walls as a macro-molecular layer. After drying, the product has the following property profile: through the formation of a separating layer, the penetration or adhesion of paints/paint pigments into or on the substrate is prevented. This separation layer along with the graffiti can easily be removed with a hot water high pressure cleaner (at least 80° - 90° C). Funcosil® AGO reduces the absorption of water and pollutants on cementitious substrates. The surface texture of treated surfaces is maintained. The colour is slightly intensified and the degree of gloss is slightly reduced.

Characteristic data of the product:

Active ingredient content:	> 10 % (m/m)
Carrier agent:	water
Density:	1.00 kg/l
pH value:	approx. 8.5
Viscosity:	DIN 4 cup 12 sec.
Appearance:	milky

Characteristic data of the product after application:

Water repelling, example:
Water absorption coefficient $w < 0.1 \text{ kg}/(\text{m}^2 \text{ h}^{0.5})$
No essential reduction of water vapour diffusion (depending on substrate), UV-stable, weather stable, alkali resistant, dries non-stick.

Range of use:

Funcosil® AGO can be used to treat cementitious building materials such as sand-lime brick, brick, natural stone, render and concrete in wall areas as well as sculptures and monuments. A solid substrate that resists a high pressure, hot water jetting when cleaned (at least 80°C on the surface of the facade) is a prerequisite for Funcosil® AGO to function. The agent is not suitable for friable substrates, coats of paint and bonded heat insulating systems and should not be used on floors.

Substrate:

The substrate must be in sound condition. Structural defects such as e.g. cracks, cracked joints, defective connections, rising damp and hygroscopic moisture must be corrected first. It must be ensured that water and damaging salts dissolved in the water cannot penetrate from behind the treated zone.

Before impregnation is carried out, adhering dirt and pollutant crusts as well as efflorescence, alga and moss should be removed by a suitable cleaning procedure. Cleaning opens the capillaries and pores and allows the impregnation agent to be absorbed. When cleaning, make sure that as little building substance as possible is damaged. Cleaning agent residue (e.g. surface-active agents) from previous cleaning can impair the effect of Funcosil® AGO and must be thoroughly washed off for this reason.

Substrate condition:

If salts that damage the building such as sulphates, chlorides and nitrates are present, a quantitative salt analysis is essential. High salt concentrations lead to building damage that cannot be prevented by impregnation.

Adjoining surfaces:

Those parts of the facade that are not to come in contact with the impregnation agent such as windows, varnished surfaces or surfaces to be varnished as well as glass and plants must be covered with polyethylene sheets.

Directions:

The impregnation agent is applied in a pressureless flow coating procedure with a wide spray nozzle in such quantities that a 30-50 cm long film of liquid runs down the surface of the building material. The spray nozzle is led along the facade and immediately worked over with a wide brush. The procedure is repeated at least once and more often if necessary. To avoid missing places, limited sections should be completed without interruption. On smaller, complicated surfaces that do not allow a spray or flow coating application, work can be carried out with a brush or roller. When this application method is used, insufficient application amounts can only be avoided if tools are always well saturated. Freshly treated surfaces should be protected from driving rain for at least 5 hours. Strong wind and direct sunlight can accelerate evaporation of the carrier agent which negatively influences penetration depth. In many cases, the substrate to be protected has already been treated with a water repelling impregnation. In these cases, the substrate must be primed with Funcosil® AGO using a brush - massaging it into the substrate. Special additives temporarily eliminate the hydrophobic effect which allows the water based product to adhere to the water repelling surface.

Working temperature:

Treatment can be carried out at an object temperature range of 10° to 25°C.

Technical Information Sheet

Removing Graffiti:

Sprayed on varnish graffiti on treated building material surfaces are removed with a hot water high pressure cleaner with a temperature of approx. 80° to 90°C. Since the impregnation agent dissolves on the facade along with the graffiti, the treatment must always be repeated after the surface has been cleaned and has dried.

It is important that the temperature of the water is still 80° C when it hits the surface to be cleaned which means that the temperature when leaving the nozzle will need to be accordingly higher.

Principles of hot water high pressure cleaning: The farther the spraying distance from the high pressure cleaner, the lower the water temperature when it hits the surface of the building.

Example: a hot water high pressure jet at 80°C, 50 bar, at an angle of 40° and a distance of 1 m only has a temperature of approx. 35° C when it hits the building surface. So as a rule, better cleaning results are achieved with lower pressure and higher temperatures (e.g. 25 bar, 120° C) than at higher pressure and lower temperatures (e.g. 120 bar, 85° C). Some surfaces simply do not allow the employment of a high pressure cleaner. In these cases, Funcosil® Graffiti Remover is a practical alternative for cleaning surfaces that have been treated with Funcosil® AGO and need cleaning.

Tools and cleaning:

All low pressure, conveyor and spraying equipment, liquid pumps and especially the Funcosil MV2 Sprayer are suitable.

Tools should be clean and dry. After use and before longer pauses, clean thoroughly with water.

Packaging, application rate and storing:

Packaging:	5 l and 30 l plastic canisters	
Application rate:	Clinker:	0.1-0.2 l/m ²
	Natural stone:	0.3-0.8 l/m ²
	Brick:	0.2-0.5 l/m ²
	Granite:	0.1-0.2 l/m ²
	Concrete:	0.2-0.3 l/m ²

The required amount of impregnation agent for calculation and tender should be determined on a sufficiently large trial area (1-2 m²). The effectiveness of the impregnation can also be tested on this surface.

Shelf-life: At least 6 months stored cool but frost-free in closed, original containers.

Safety, ecology, disposal:

Further information concerning safety during transport, storage and handling as well as on disposal and ecology is found in the latest Safety Data Sheet.

The statements above are compiled from our field of production and according to the latest technological developments and application techniques. Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet.

Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid.

With the publication of this Technical Information Sheet all previous editions are no longer valid.