

Technical and material data sheet

ALPHA ISOLATION



Reflexně izolační
nátěry

Downloads



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18L

ALPHA ISOLATION is designed to act as a conductive insulating and reflective layer, i.e. an intermediate layer for ALPHA INNER, ALPHA FACADE or ALPHA COVER.

It is an effective protection against frost penetration or heat leakage and condensation of surface water vapour, thereby also preventing mould growth. It is applied to the exterior or interior walls of industrial and residential buildings. Provides high adhesion for all known building materials. The coating reflects 92% of TSR and up to 97% of visible light. The coating is health friendly and environmentally friendly.

Main properties

- Significantly reduces energy costs for cooling or heating
- Prevents mould growth
- Protects the substrate from surface condensation
- Internal or external use
- Vapour permeable

Application

ALPHA ISOLATION is used as an intermediate layer for the application of the main coat of ALPHA INNER, ALPHA FACADE and ALPHA COVER.

Technical properties

Theoretical consumption ¹	1,2 litres/m ² , one layer - 1 mm
Practical consumption	Practical consumption depends on many factors such as porosity, surface roughness and material loss during application.
Dilution	Not diluted. Dilute only approx. 200 - 400 ml when first opened for better mixing.

Recommended wet film layer	700 µm (max. 1000 µm - not to be exceeded / 1st layer)
Stirring	Always the whole package after opening, with a construction mixer or auger mixer on a drill, at approx. 150 rpm.
Stirring during prolonged application	Stir every 40 minutes
Packing	18 litres / 9,7 kg
Density	0,53 g/cm ³
Appearance	White, whiteness 96 %
Colour	Cannot be coloured
Gloss level	Matte
Odour	Odourless
Shelf life ²	24 months, must not freeze
Flash point	Non-flammable

Recoatingability and curing time ³

To the touch	3 hours
For handling	6 hours
For the next layer	12 hours
Fully dry	48 hours

Safety instructions

Read the Technical and Safety Data Sheet

¹ Consumption depends on the surface

² Stored in original and sealed containers at a temperature between +5 °C - +35 °C

³ At +20 °C and 50% PH

Surface preparation

The surface must be free of loose elements, dry, firm, free of oil and grease stains, free of dust, mould, salts, rust and old incoherent coatings. The surface must be perfectly hardened and structurally uniform. Before applying the technology, the surface must be perfectly mature. We first apply to fresh plaster after it has dried completely.

Suitable for all porous surfaces, such as concrete, raw masonry surfaces, stone, unglazed ceramics, plaster, plasterboard, etc., where ALPHA PRIMER CT primer has been applied.

Procedure and application / tools

The primer must be thoroughly mixed before application! Always mix the entire contents of the package! Before application, mix the primer preferably with a rotary mixer at a maximum speed of 150 rpm until the mixture is homogeneous.

When the bucket is opened, a crust of 80% microspheres is formed on the surface, which must be mixed with the dispersion at the bottom of the bucket. The crust must be 'punctured' with a stirrer and mixed from the bottom up.

After the first opening of the bucket, add 200 - 400 ml of clean water for better mixing of the coating. Use a spatula to make a groove where the coating meets the bucket wall. Pour 200 to 400 ml of water into the trough and let the bucket stand for a few minutes to allow the water to absorb. Start stirring from the bottom up to form a liquid homogeneous mass. Finish mixing until smooth, the total mixing time may be a few minutes.

It is recommended to apply the coating preferably with a professional spraying device (airless type with a minimum flow rate of 4.3 litres/minute) to achieve a perfect aesthetic appearance. In spraying equipment it is necessary to remove all filters before application! The pressure at the spray gun nozzle during application must not exceed 200 bar.

ALPHA ISOLATION is applied in one or two layers at most.

The coating can be applied with a brush or roller. A flocking roller or a decorative roller made of coarse foam is ideal. When applying with a brush, it is not recommended to go back for minor imperfections. Partial overpainting of already painted layers will cause the coating to be inconsistent with significant aesthetic flaws. It is recommended to apply the coating generally in two cross layers. Only apply coating in complete areas.

Material consumption is influenced by the surface texture and method of application. Apply the coating as required in individual layers and always in accordance with the application instructions. During prolonged application, the coating must be mixed every 40 minutes with a mixing device (drill, stirrer or other). In case of higher ambient temperatures (e.g. direct sunlight), mix the coating more frequently. It is not advisable to work with the coating in humid environments.

Failure to follow the coating application procedure may result in insufficient polymerisation of the coating and thus affect the properties and functional characteristics of the coating.

The coating will gradually cure after 24 hours. After approximately 12 hours, once the surface is dry to the touch, continue with the next layer of coating. Avoid applying excessive amounts of coating. Applying excessive amounts of coating will cause run-off or other optical defects.

Important cautions/restrictions

Thinning this product beyond the first opening of the bucket is not recommended and may significantly reduce the effectiveness of the product. Do not apply too thick a layer. Apply with a brush, roller or Airless device. Apply only one layer of coating at a time. Applying thicker layers will result in insufficient polymerization of the coating, blistering and prevent adhesion to the surface. Application in thick layers that cause blistering will result in loss of warranty and functionality of the coating. At the same time, cracking of the coating will occur.

If you stop applying the coating with the Airless device for more than 10 minutes, submerge the gun in a bucket of water and cover the hose, coating and Airless device to prevent excessive drying of the coating inside the hoses.

When setting up the Airless device, start at approximately 80 bar pressure. If the gun does not spray smoothly, increase the pressure slightly. The aim is for the gun to spray continuously, but for the pump to stop when the trigger is released. If the pump continues after the spray gun is released, the pressure is too high. The ideal setting is between 110 and 145 bar.

The product is filled with microspheres with very high compressive strength, which allows the product to be used on erratic surfaces and in other very demanding conditions without damage.

Do not apply the coating if

- rain is expected when applied outdoors
- the coating must not be exposed to direct rain for at least 6 hours after application
- the relative humidity is $> 80\%$
- the moisture content of the surface is $> 4\%$ by weight (concrete: $> 2.5\%$)
- substrate (surface) and ambient temperature is $< +17\text{ }^{\circ}\text{C}$
- ambient temperature is $> +35\text{ }^{\circ}\text{C}$
- the surface is exposed to direct sunlight and the ambient temperature is $> +35\text{ }^{\circ}\text{C}$

After opening the original packaging, we recommend to consume the contents as soon as possible, keep unused coating in a sealed container with as little air above the surface as possible. The applied coating must not be exposed to direct steam, water or other liquids for long periods of time.

Cover areas where coating will not be applied with material to protect against contamination of unpainted surfaces: masking film, non-woven fabrics, tape, etc.

Application conditions

- Surface temperature: $+17\text{ }^{\circ}\text{C}$ min. $+35\text{ }^{\circ}\text{C}$ max.
- Ambient temperature: $+17\text{ }^{\circ}\text{C}$ min. $+35\text{ }^{\circ}\text{C}$ max.
- Relative humidity: $< 80\%$

Recommended layers

1 total layer max. 1 mm wet. A single layer thicker than 1.0 mm wet is not permitted.

Drying conditions

The coating does not require any special measures during drying (curing). Drying time depends on air temperature, humidity and surface temperature.

Drying time

Drying time depends on the surface temperature and humidity. The drying (curing) time is a maximum of 24 hours. Apply the next layer only after the previous layer has completely dried. The ambient temperature during drying must be at least +17 °C, ideally +23 °C.

Cleaning tools

With water - as soon as possible after use.

Storage / transport / shelf life

This product retains its useful properties for at least 24 months from the date of manufacture when stored in the prescribed manner in the sealed, intact original packaging. Store at a temperature of +5 °C to +35 °C, humidity up to 80 %. The temperature during transport of the material should not fall below +5 °C and rise above +35 °C. Protect the product from direct sunlight, frost and high temperatures during transport and storage.

Notice

The products can be applied when the surface temperature is above +17 °C and the air temperature is between +23 °C and +30 °C. Avoid application if adverse weather conditions are expected during the curing period (wind, increased dustiness, rain, frost).

Read the Technical and Material Data Sheet, Safety Data Sheet and Application Manual before use.

Poznámka

The information contained in the Technical Data Sheet corresponds to our current knowledge of the manufacturer. Products are of the highest quality and uniform within manufacturing tolerances. The values and data given in this Technical Data Sheet are based on the results of laboratory tests and manufacturer's testing. The information given, especially the advice for the processing and use of the coating, is based on experience with practical applications under standard conditions and proper storage and use.

These values may vary with practical application. Due to variations in processing conditions and other external influences, and the varying nature and treatment of surfaces, a procedure based on the information given, or other written or oral recommendations, may not always guarantee a satisfactory working result. All recommendations made by the manufacturer or distributor of the coating are general.

The applicator must verify that the coatings are suitable for the intended purpose of application. The latest edition of the application instructions and product data sheet should always be followed. These, together with other information, are available on request from the manufacturer. Purchasers and users are encouraged to perform a self-test on a sample of the area to be coated prior to application.

The manufacturer shall not be liable for defects resulting from failure to follow the instructions for use given in the Technical and Material Data Sheet, Safety Data Sheet and Application Manual.

Precautions for handling the products

The coating does not contain substances harmful to health, is not labelled or classified as hazardous to health.

Safety precautions

Use protective equipment such as goggles, gloves, protective clothing, etc. to protect eyes and skin when working. Protect the respiratory tract with a suitable respirator in confined spaces and during spray application. Provide ventilation in case of application in closed rooms. More detailed information on hygiene, occupational safety and environmental protection is given in the safety data sheet.

Wash splashed skin with soap and water. Rinse mouth with water if swallowed. If eyes are affected, flush with a stream of water. Exit to fresh air if inhaled.

The material is non-flammable. In the event of a fire in structures, equipment or buildings to which the coating has been applied, we recommend the use of water, foam, dry chemical extinguishing agents or carbon dioxide to extinguish the fire. In the event of a coating leak or spill, use any absorbent material such as sand, etc.

Disposal of packaging/product

The material is not classified as an environmentally hazardous substance (Act No. 185 2001 Coll. on Waste). Dispose of unused material or packaging in accordance with applicable regulations. Clean packaging: category 'O' 15 01 02 - Plastic packaging; Product residues: category 'O' 08 02 99. Keep out of reach of children. Packaging is fully recyclable.

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Version

For professional use only

Producer



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