

Technical and material data sheet

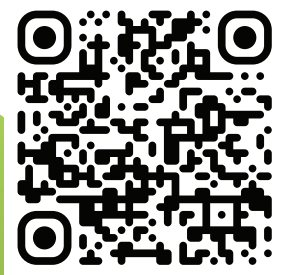


# ALPHA ANTICONDENS

ALPHA ANTICONDENS is a special coating designed to effectively prevent surface condensation on steel structures and other surfaces. This environmentally friendly, non-toxic, and harmless coating provides long-term protection for both interior and exterior use.



## Downloads



Batch number: label

Last revision: 11/15/2023

Date of manufacture: label

Version: 01 For professional use

Expiration date: 24 months from the date of manufacture in the original unopened packaging



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## ALPHA ANTICONDENS

### Properties

- ✓ **Condensation protection:** Effectively protects the substrate from moisture condensation both under the coating and, above all, on its surface.
- ✓ **Corrosion elimination:** By preventing condensation, it actively prevents corrosion, significantly extending the service life of treated structures and equipment.
- ✓ **Extended service life:** Thanks to its protective properties, it contributes to the longer functionality and reliability of coated objects.
- ✓ **Environmental profile:** The product is environmentally friendly, non-toxic, and harmless to health.

### Application

ALPHA ANTICONDENS coating is used as a primer on all types of steel structures (iron, steel, copper, aluminum, stainless steel, etc.) where condensation needs to be prevented. Typical applications include:

- ✓ **Cold water pipes and air conditioning systems**
- ✓ Interior surfaces where moisture condensation occurs

With ALPHA ANTICONDENS coating, you get a reliable and long-lasting solution to surface condensation problems.

### Technical properties

**Color:** White

**Coverage:** 1.2 liters per 1 m<sup>2</sup> when wet, 1 mm thick

**Application temperature:** The temperature of the coating, environment, and substrate must be between +15 and +35 °C during application and for 24 hours after application, ideally +20 to +25 °C.

**Storage:** Store in a dry, cool, frost-free place in the original sealed packaging for 24 months at temperatures between +5 °C and +35 °C. Do not expose to direct sunlight. Store opened and unused paint in a well-sealed container.

**Packaging:** 18 liters in PP buckets.

### Application information

**Tools:** Brush or airless equipment

**Recommended dilution:** The coating can be diluted. Dilute with drinking water. 18-liter package – add 0.4 liters of clean water.

**Application with Airless equipment:** If you are using Airless equipment, the minimum flow rate must be 5.3 liters per minute. All filters must be removed from the spray equipment before application! The pressure on the spray gun nozzle during application must not exceed 150 bar. Otherwise, the microspheres will be damaged. If you hear crackling in the hose, the pressure is too high and the microspheres have broken.

**Mixing:** Important instructions for proper product preparation before application.

Before use, it is necessary to mix the product thoroughly to achieve the correct consistency and functionality.

**Condition of the coating material after opening:** After opening the bucket, the product may appear to have a thick and chalky texture. This is normal. It is caused by the hollow ceramic beads with a vacuum rising to the surface during storage in the bucket, while the liquid component sank to the bottom.

**Mixing procedure:** For perfect mixing and preparation of the material, follow these steps:

- 01. Preparation of tools:** You will need a low-speed drill (cordless or mixer) and a standard mixing attachment (paddle/auger).
- 02. Initial mixing:** Make a groove about an inch deep along the edge and pour in water, approx. 0.4 liters per 18-liter package. Let it stand for 10-15 minutes. Then submerge the mixing paddle to the bottom of the bucket. Hold the bucket between your legs for better stability. Slowly begin to break up the thickened layer with a sweeping upward motion of the paddle. This will create space for the mixer to rotate.
- 03. Activating the mixer:** Start the drill at low speed and slowly begin to mix the product.
- 04. Thorough mixing:** Once the mixture becomes more fluid, clean the sides of the bucket with the mixer or spatula to ensure that all of the product is incorporated into the mixture. Continue mixing until you achieve a smooth, creamy consistency.
- 05. Finishing:** Small lumps may remain in the mixture. It is not necessary to mix them out completely, as the product is strained into a second bucket before spraying, which ensures that the nozzle on the airless device will not clog.

### Warning

**Safety:** Always use a low speed drill to prevent material from splashing and breaking the microspheres.

**Cleaning tools and after application:** Protect all tools from drying out during work breaks and wash them with water after use. Wash contaminated areas immediately with water. Protect all tools from drying out during work breaks.

**Surface protection:** If areas that are not to be coated become contaminated, wash them immediately with water. Ensure ventilation during application and drying.

Density	0,53 g / cm <sup>3</sup>
Appearance	White, whiteness 96 %
Gloss level	Matte
Odor	Typical for acrylic paints
Shelf life	24 months, must not freeze
Safety instructions	Read the Technical and Safety Data Sheet

**Do not apply if:** Relative humidity is higher than 80%. The moisture content of the substrate is more than 4%.

**Substrate and substrate preparation:** The substrate must be dry, cohesive, free of impurities, chemically stable, and mature. The substrate must be solid, dry, free of cracks, crevices, dust, and flaking parts. The substrate must be sufficiently flat; the coating material will only copy any unevenness and imperfections. The substrate must be coated with ALPHA PRIMER.

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### Procedure and application

#### Apply only to switched-off, dry equipment!

The prepared coating can be applied immediately. Apply with a brush or spray equipment. The previous coat must be completely dry. Coating should be carried out at ideal temperatures between +15°C and +35°C. Do not coat in humid conditions or on a damp substrate. We recommend stirring ALPHA ANTICONDENS occasionally during application. Contaminated areas, tools, and work equipment must be washed before the coating dries. Apply evenly and without interruption.

ALPHA ANTICONDENS coating should always be applied in INDIVIDUAL LAYERS, up to a maximum thickness of 1000 microns per layer when wet (1 mm). If the layer is thicker, blisters will form, the center of the coating will not dry, and it will therefore not be functional. The insulating properties of ALPHA ANTICONDENS coating will be lost.

Apply enough individual layers to the desired thickness to ensure insulating properties and that the surface is insulated.

**Total application layer:** The total layer for proper functionality is 8 mm when dry. We always recommend a test coat to determine the actual need for ALPHA ANTICONDENS and how to apply it.

#### Increased resistance for problematic areas

If you are applying the coating to surfaces that are subject to significant and frequent movement (e.g., due to vibrations or intermittent operation), consider using a fiberglass reinforcement mesh.

- **Applying the mesh:** The mesh is inserted into the final layers of the ALPHA ANTICONDENS coating.
- **Important:** It must be completely embedded and covered with the final layer of coating so that it is not visible on the surface. This procedure ensures maximum prevention against cracking and separation of the coating from the substrate.

Careful preparation guarantees a professional result and long-term protection of your surface.

**General note:** Failure to follow the coating application procedure may result in insufficient polymerization of the coating, thereby affecting the properties and functional characteristics of the coating. The coating will gradually harden after 72 hours.

Allow sufficient time for each coat to dry. If the coats do not dry, moisture trapped between the coats will cause blistering and reduce the insulating properties. Cracking may occur to release pressure, gases, and moisture.

When setting up the Airless device, start at a pressure of approximately 80 bar. If the gun does not spray smoothly, increase the pressure slightly. The goal is for the gun to spray continuously, but for the pump to stop when the trigger is released. If the pump continues to run after the spray gun is released, the pressure is too high. The ideal setting is 130-150 bar.

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

If the coating is to be applied near equipment where chemicals are dripping or splashing, we recommend that the top coat be painted with a two-component coating that can withstand the chemical load.

**Coloring:** ALPHA ANTICONDENS coating cannot be colored. We recommend using ALPHA TOP coating as the top coat, which can be colored with water-soluble pigment.

### Warning and general instructions

**Processing conditions:** The temperature of the substrate and air during application must not fall below +15 °C. During application, direct sunlight, wind, or high humidity must be avoided. In conditions that promote rapid drying of the interior coating (temperature above +35 °C, drafts, heated substrate, etc.), the applicator must consider all circumstances (including, for example, the size of the area) affecting the possibility of proper application, especially joining. In conditions that prolong drying (especially low temperatures and high humidity), slower drying of more than 24 hours must be expected. High temperatures, especially in summer, adversely shorten the drying time. High humidity or low temperatures (e.g., in late autumn) can significantly prolong the drying time and adversely affect the properties of the coating.

**Maintenance and restoration of finished surfaces:** To maintain the useful parameters of the coating in the long term, it is advisable to regularly inspect and maintain the coated surfaces as follows: sweep, vacuum, or wash off loose dirt. Remove more stubborn dirt using universal cleaning agents and then wash with clean water.

**Safety precautions:** See the product safety data sheet for details.

Do not eat, drink, or smoke when working with ALPHA ANTICONDENS coating. We recommend protecting your eyes with goggles with side shields. If swallowed, rinse your mouth with water. If the product comes into contact with your eyes, rinse them with running water. If symptoms persist, seek medical attention. Treat your skin with a regenerative cream after washing. Keep out of reach of children.

**Disposal of packaging:** The packaging is fully recyclable. The material is not classified as environmentally hazardous. Dispose of unused material or packaging in accordance with applicable regulations. Dispose of product residues as mixed construction and demolition waste.

# Technical and material data sheets

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### Other informations

This technical data sheet, provided as part of our support to customers and processors, has been created based on our own experience and the current state of science and technology. The procedures and recommendations provided herein represent, in a general sense, optimal and safe solutions, but are not legally binding and do not establish a contractual relationship or additional obligations under the purchase agreement. Nor do they relieve the processor of the responsibility to verify the suitability of this product for its intended use under specific conditions. The consumer is responsible for the correct use of the product. The information provided in this technical data sheet is based on laboratory findings and our professional experience with the aim of achieving the best possible results at a professional level when using the product. We accept no responsibility for damage caused by incorrect use of the product or its inappropriate selection. We therefore recommend that the buyer or user test our materials professionally and technically to ensure that they are suitable for the intended purpose under the given conditions in the given object.

This technical data sheet loses its validity upon the publication of its amendment. The manufacturer reserves the right to make possible later changes and additions. The manufacturer reserves the right to change the information in technical and promotional materials without prior notice. Updated versions of technical data sheets are available from the manufacturer upon request. All information in this manual is non-binding.

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