

Technical and material data sheet

ALPHA PRIMER



Reflective insulation coatings



Downloads

ALPHA PRIMER is an anti-corrosion primer that has excellent corrosion resistance. The application is suitable for all surfaces made of steel, aluminium, stainless steel, copper, etc.

Main properties

- Primer
- For all metallic and non-metallic surfaces
- Ensures adhesion to other product lines ALPHA TEMPER, ALPHA FROZEN, ALPHA ANTICONDENS and ALPHA TOP

Application

ALPHA PRIMER is used as an anti-corrosion primer.

Technical properties

Theoretical consumption ¹	0.24 kg/m ² , not diluted / two layers
Practical consumption	Practical consumption depends on many factors such as porosity, surface roughness and material loss during application.
Dilution	Not diluted
Recommended wet film layer	250 µm
Mixing	Always the whole package after opening
Packaging	2 and 5 litres
Density	1,3 g/cm ³
Appearance	Red, produces a matt red surface when dry
Colour	Cannot be coloured
Gloss level	Matte

Odour	Odourless
Shelf life ²	24 months, must not freeze
Flash point	Non-flammable

Repeatability and maturation time ³

To the touch	2 hours
For handling	3 hours
For the next layer	5 hours
Completely dried out	72 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

Preparation of the surface

Cleanliness of the surface

Quick summary of surface preparation:

- Remove oil, grease and other dirt with a suitable detergent.
- Remove salts, detergents and other impurities with high-pressure fresh water to Wa 2 or Wa 2½.
- Remove rust by blasting the surface with Sa 2 or ideally Sa 2 ½.
- Where blasting is not possible, the surface can be cleaned mechanically by hand to St 2, depending on the degree of contamination.
- Before applying ALPHA PRIMER coatings, the surface must be dry and free of dust.

Resolution of the surface where the coating will be applied

Unpainted steel structure: Steel surfaces that have not yet been painted with any protective coating may be covered to varying degrees with rust, scale or other contaminants (dust, grease, ionic contaminants/soluble salts, deposits, etc.). Prime the surface with ALPHA PRIMER waterborne anti-corrosion primer.

A steel surface with a coating system that needs to be repaired: The condition of the existing coating system should be assessed using degradation levels in accordance with ISO 4628 whenever coating maintenance is carried out. Determine if the system will need to be completely removed or if portions of the coating can be retained, then apply ALPHA PRIMER primer.

Aluminium, copper and stainless steel: In the case of aluminium and stainless steel, the surface should be cleaned with clean water and a cleaning agent and then thoroughly rinsed with high-pressure clean water. Better adhesion of the coating system can be achieved by abrasive blasting with a mineral abrasive or scrubbing with a brush to roughen the surface, then apply ALPHA PRIMER primer.

Description of the surface after cleaning

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- Wa 1 **Light blasting with a high pressure beam:** When viewed without magnification, the surface shall be free from visible traces of oil and grease, non-stick or damaged paint, non-stick rust or other foreign matter. Any residual soiling shall be randomly dispersed and shall adhere firmly.
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- Wa 2 **Thorough blasting with a high pressure beam:** When viewed without magnification, the surface shall be free of visible traces of oil, grease and dirt and most rust, previous coatings and other foreign matter. Any residual soiling shall be randomly dispersed and may contain firmly adhering coatings, firmly adhering foreign matter and shadows of previously occurring rust.
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- Wa 2½ **Very thorough blasting with a high pressure beam:** When inspected without magnification, the surface must be free of all visible signs of corrosion, oil, grease, dirt, previous coatings and, except for light traces, free of all foreign substances. If the original coating was intact, the surface may show colour changes. Grey or brownish-black discolouration in areas of pitting or corroded steel cannot be removed by further blasting with water.

Surface preparation grades according to ISO 8501-1

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- Sa 3 **Blasting to a visually clean surface:** When viewed without magnification, the surface must be free from visible traces of oil, grease, dirt and scale, rust, paint and foreign matter. The surface shall have a uniform metallic appearance.
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- Sa 2 ½ **Very thorough blasting:** When viewed without magnification, the surface shall be free from visible traces of oil, grease and dirt, scale, rust, paint and foreign matter. Any remaining traces of dirt shall show only slight discolouration in the form of spots or streaks.
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- Sa 2 **Thorough blasting:** When viewed without magnification, the surface shall be free from visible traces of oil, grease and dirt and shall most scale, rust, paint and foreign matter must also be removed. Any remaining dirt must be firmly adhered.
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- Sa 1 **Light blasting:** When viewed without magnification, the surface must be free of visible traces of oil, grease and dirt, little adhering scale, rust, paint and foreign matter.

Standard stages of basic surface preparation using manual and mechanised cleaning

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- St 3 **Very thorough manual and mechanised cleaning:** As with St 2, but the surface has to be cleaned much more thoroughly to get the metallic tint given by the surface.
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- St 2 **Thorough manual and mechanised cleaning:** When viewed without magnification, the surface shall be free from visible traces of oil, grease and dirt, low adhering scale, rust, paint and foreign matter.

Procedure and application / tools

The coating must be thoroughly mixed before use! Always mix the entire contents of the package!

ALPHA PRIMER can be applied to properly prepared surfaces in one, ideally two layers, preferably with a soft brush or roller, crosswise or Airless.

The material consumption is influenced by the surface texture and the application method. Apply the coating in individual layers as required and always in accordance with the application instructions. It is necessary to mix the coating during application. In case of higher ambient temperatures (e.g. direct sunlight), mix the coating more frequently. The coating should not be handled in damp environments.

After about 5 hours, once the surface is dry to the touch, continue with a second layer. Avoid applying excessive amounts and prevent puddles from forming.

Important notices/restrictions:

Do not apply coating unless

- rain and frost are expected when applied outdoors
- the coating must not be exposed to direct rain for at least 6 hours after application
- relative humidity > 80%
- the surface is icy
- the surface is damp/wet

After opening the original packaging, we recommend that the contents be used as soon as possible, keeping 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 the places where the coating will not be applied with material for protection against contamination of unpainted surfaces: covering foils, non-woven fabrics, tapes, etc.

Application Terms

- Surface temperature: +20 °C min. +35 °C max.
- Ambient temperature: +20 °C min. +35 °C max.
- Relative humidity: < 80%

Drying conditions

The coating does not require any special measures during drying (curing). Drying time depends on air temperature, humidity and surface temperature. The average drying time for one layer is up to a maximum of 24 hours.

Drying time

Drying time depends on the surface temperature and humidity. The drying time (curing) 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 +20 °C, ideally +23 °C.

Cleaning tools

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 +20 °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 dust, rain, frost).

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

Note

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 datasheet 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 when applied in practice. Due to different processing conditions and other external influences, the varying nature and modification of the materials, 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 painted prior to application.

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

Precautions for handling products

ALPHA Primer is classified as harmful to the environment. It contains zinc phosphate. Harmful to aquatic organisms, with long-term effects. Avoid release into the environment.

Safety precautions

When working with the coating, observe the safety instructions, the applicable regulations of the relevant authorities on occupational health protection and basic hygiene rules. Use protective equipment such as goggles, gloves, protective clothing, etc. to protect your eyes and skin. 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 the affected skin with soap and water. If swallowed, rinse mouth with water. If the eyes are affected, flush them with a stream of water. Exit to fresh air if inhaled. May cause an allergic reaction. Dangerous respirable droplets may form when sprayed. "Wash splashed skin with soap and water, wash eyes immediately with plenty of water if hit. If irritation persists, seek medical attention. In case of ingestion, drink about 0.5 l of lukewarm water with 10 crushed charcoal tablets, seek medical attention if there is difficulty. Do not induce vomiting. Do not inhale aerosols or mist. If basic hygiene rules are followed, do not endanger health."

The material is non-flammable. In case of fire in structures, equipment or buildings on which the coating has been applied, we recommend using 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

Dispose of contents/packaging by incineration in a hazardous waste incinerator or disposal in hazardous waste landfills. The product is a treated article, it contains a biocidal product. Contains CMIT/MIT reaction mixture (3:1) [Index Number: 613-167-00-5]. Keep out of reach of children. Packaging is fully recyclable.

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1.2.2023

Version

For professional use only

Producer



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