

Chemcolor corrosion protection system

Cink antikor 1K

One-component ethyl silicate zinc anticorrosion coating

Intended use

Zinc anticorrosive coatings are intended for primary protection of iron structures, tanks, and other iron objects under severe exposure conditions. They are used as a primer to achieve exceptional anticorrosive protection under heat-resistant silicone coatings up to 420°C. With a dry film thickness of up to 100 microns, there is no risk of cracks.

In the system with corresponding intermediate and top coating it is suitable for exposure in aggressive industrial and sea atmosphere – C5 according to ISO EN 12944.

Properties Areas of application

- extraordinary resistance to chemicals, corrosion and temperature up to 420°C
- excellent adhesion to metals
- quick-drying
- 90% zinc in the dry matter
- fast drying
- exceptional primer in anticorrosion systems for the most severe exposure conditions
- primer for exceptional anticorrosion protection beneath heat-resistant silicone coatings up to 420°C
- it is used only on sand blasted surfaces

Technical data*

Packaging		25 kg
Application temperature		3°C above the dew point
Application humidity		Minimum 50% relative air humidity
Thinning		CINK ANTIKOR 1K THINNER
Drying time	Temperature [°C]	10 °C 20 °C/65% RH 30 °C 25/60 15/30 10/25
(dust dry / touch dry)	Time [min]	
Recoating interval	Minimum	16 h
22°C;	Maximum	Unlimited
Recommended film thickness	Wet	approx. 140 microns
	Dry	70 microns
Theoretical coverage	70 µm dft	9.7 m ² /L 3.2 m ² /kg
Shades		Grey - zinc
Gloss		mat
Solids content	By weight By volume	86 ± 2% 67 ± 2%
Density		Approx. 3 g/ml
Viscosity	ISO 2431	55 s F6 (20°C)
Adhesion		ISO: 0 / ASTM: 5B
VOC content		IIA(i), 500 g/l (2010); product contains: max. 375 g/l

(*All technical data stated in this technical data sheet are based on laboratory tests. Actual data may vary depending on application conditions beyond our control. dft-dry film thickness)

Surface preparation

Good practice

The surface must be dry, clean and free of dirt, grease, rust, slag residues, salts, or other contaminants that could prevent good adhesion. Welds, repaired areas, joints and surface damage identified during surface preparation must be properly cleaned and treated before painting.

Surfaces that have oxidized after preparation and before painting must be treated in accordance with the appropriate standard. Consult the specified standards. For further advice, contact Chemcolor technical service.

Metals

Clean surfaces with solvents to remove contaminants such as oil, grease, salts, dirt and markings before preparing the surface for painting. Highly exposed surfaces must be prepared to ISO 8501-1 SA 2.5. After cleaning, the surface must be clean with a roughness between 40 and 70 microns.

Application conditions

The substrate temperature must be at least 3°C above the dew point during application.

The material temperature must be 3°C above the dew point when opening, during mixing and during application.

Temperature: 5° - 30°C

This temperature applies to the air, surface and material. The surface must be visibly dry.

Relative air humidity: 50% - 85%

Material preparation and application

CINK ANTIKOR 1K can be applied by brush, roller, airless or conventional air spray. Stir thoroughly before application.

In opened pails, cover the paint with thinner, seal tightly and use within a short time.

Brush/roller

Brush: Natural fibres

Roller: Natural or synthetic fibre cover

Thinning: 5% Cink Antikor thinner

Airless

Pressure: 170-200 Bar

Nozzle: .013-.021

Thinning: 5-15% Cink Antikor thinner

Air spray

Air cap: 1.3 - 2.2 mm

Air pressure: 3.1 - 5.1 bar

Thinning: 10-15% Cink Antikor thinner

Brush or roller application is suitable for small areas and local repairs. Compared with spraying, brush application requires more coats to achieve the specified dry film thickness. Thinning depends on the application conditions and paint temperature.

Cleaning

Cink Antikor or Nitro thinner. If the specified thinners are unavailable, use MEK, MIBK, xylene, a 50:50 mixture of xylene and MEK or MIBK, or acetone for cleaning only.

Coating systems

Over CINK ANTIKOR 1K, we recommend EPOXY VMESNI DEBELOSLOJNI or MIOX, followed by PURKOLOR EMAJL as the topcoat. Apply a thin mist coat over CINK ANTIKOR 1K first, then a full coat, to avoid blistering.

Cleaning tools and surfaces

Clean tools and work equipment immediately after use with Cink antikor diluent, acetone or Nitro diluent, or mechanically.

Storage

The shelf life of the product in tightly closed, undamaged original packaging, stored in a dry place at temperatures between +5°C and +25°C, is 12 months from the date of manufacture.

Notes

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Chemcolor's liability for any claim, including negligence or strict liability for loss or damage arising from work performed, related to or resulting from the use of the products, shall in no case exceed the purchase price of the products or the portion of the products giving rise to the claim. Chemcolor shall in no case be liable for consequential or incidental damage.

Protective measures:

- Forced ventilation must be provided when applying the product in enclosed, unventilated spaces. The material must not be applied near open flames or welding operations.
- Wear protective equipment during work, including gloves, safety glasses and other necessary protection.
- Before eating and after work, change contaminated clothing and wash your hands.
- Observe the safety warnings on the packaging label.

Important warnings:

- Excessive dry film thicknesses (over 130 microns) can lead to cracks in the film
- Painting of next coat allowed after complete reaction - ASTM D4752 level 5
- Dispose of uncured or unbound material in accordance with applicable regulations. Fully cured material may be disposed of at municipal landfills in accordance with applicable regulations.
- Detailed safety precautions and physical, toxicological and ecological information for the product are provided in the safety data sheet, available from the Chemcolor sales department or at www.chemcolor.si.

This information is based on our experience to date and careful research. Site conditions and knowledge of the work influence the quality of application. Successful work depends on professional assessment of the substrate at handover and practical experience in selecting the appropriate product. Please also follow the manufacturer's recommendations and the safety data sheet for this product.