

Chemcolor corrosion protection system

Sikolor SE ALU, SIKOLOR SE N

Silicone epoxy paint for metals, resistant up to 650°C

Intended use

SIKOLOR SE ALU and SIKOLOR SE N are used as an aesthetic and protective enamel for iron and steel surfaces - furnaces, fireplaces, pipelines. It can be used as an independent protection with temperature resistance up to 650°C.

In combination with SIKOLOR SE PRIMER ALU or SIKOLOR SE PRIMER N, it represents an exceptional anti-corrosion system, resistant to temperatures up to 650 °C. When heated for the first time, it smokes and emits a smell.

Properties Areas of application

- high mechanical, chemical and temperature resistance
- excellent hiding power
- durability and elasticity of coating film
- easy application
- in combination with SIKOLOR SE PRIMER ALU or SIKOLOR SE PRIMER N, provides exceptional anticorrosion protection resistant to temperatures up to 650°C
- single-coat protection of pipelines, furnaces and fireplaces

Technical data*

Packaging		1-25 kg or L
Application temperature		3°C above the dew point
Application humidity		Minimum 30 and maximum 85% relative air humidity
Thinning		SIKOLOR THINNER
Drying time	Temperature [°C]	20 °C 30 / 60
(dust dry / touch dry)	Time [min]	
Final properties	Stoving	approx. 250°C - 30 minutes
Recoating interval	Minimum	24 h
22°C;	Maximum	168 h
Recommended film thickness	Wet	approx. 160 microns (alu), approx. 150 microns (black)
	Dry	50 microns
Theoretical coverage ¹	50 µm dft	6,3 m ² /L (alu), 6,7 m ² /L (black)
Shades		silver 650°C, black (500°C, on request to 650°C)
Gloss		mat
Solids content ¹	By weight By volume	48 ± 2% (alu), 53 ± 2% (black) 30 ± 2% (alu), 33 ± 2% (black)
Density ¹		1.2 - 1,3 g/ml
Viscosity ¹	ISO 2431	40 s F4 (20°C)
Adhesion		ISO: 0 / ASTM: 5B
VOC content ¹		620 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, 1-value depends on shade)

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. Observe the recoating intervals of the primers used.

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

Before preparing the surface for painting, clean it with solvents to remove contaminants such as oil, grease, salts, dirt and markings. Use manual cleaning to ISO 8501-1 St 2 or power-tool cleaning to ISO St 3 to remove corrosion and prepare the surface in accordance with the standard. Highly exposed surfaces or surfaces intended for immersion must be prepared using the ISO 8504-2 method or blast-cleaned to ISO 8501-1 SA 2.5. After cleaning, the surface must be clean with a roughness of 25 to 50 microns.

Application conditions

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

Temperature: 5° - 30°C

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

Relative air humidity: 30% - 85%

Material preparation and application

SIKOLOR SE 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: /

Airless

Pressure: 170-200 Bar

Nozzle: .013-.021

Thinning: 5% Sikolor thinner

Air spray

Air cap: 1.3 - 2.0 mm

Air pressure: 3.1 - 5.1 bar

Thinning: 5% Sikolor 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

Sikolor 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

SIKOLOR SE ALU and SIKOLOR SE N can be used as a single-coat finish or in combination with SIKOLOR SE PRIMER ALU or SIKOLOR SE PRIMER N.

Cleaning tools and surfaces

Clean tools and work equipment immediately after use with Sikolor 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 6 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:

- When heated for the first time, it smokes and emits a smell.
- 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.