Chemcolor corrosion protection system

Epoxykolor vmesni miox

High-build epoxy intermediate coating

Intended use

Used as an intermediate coating for equipment in shipbuilding, bridge protection, the chemical industry and power plants, and for metal structures. Also used as an intermediate coat over one- or two-component zinc coatings. In dry atmospheres, the coating withstands up to 180°C, and in humid and chemically aggressive atmospheres up to 130°C.

In a system with a suitable primer and finishing coat, it is suitable for exposure to industrial or marine atmospheres – C 4 - 5 according to ISO EN 12944.

Properties

- long-term active anticorrosion protection of metals
- quick-drying
- contains no lead or chromates

Areas of application

- in a system with an appropriate primer, suitable for exposure to industrial and coastal atmospheres
- suitable for direct contact with various media

Technical data*

Packaging	A	30 kg		
	B	2.5 kg		
Mixing ratio	By weight	A : B	=	12:1
	By volume	A : B	=	6,2:1
Pot life	Temperature	10 °C	20 °C	30 °C
	Time [h]	10	8	6
Application temperature		3°C above the dew point		
Application humidity		Minimum 30 and maximum 85% relative air humidity		
Thinning		EPOXY THINNER		
Drying time	Temperature [°C]	10 °C 30 / 90	20 °C 15 / 30	30 °C 10 / 20
(dust dry / touch dry)	Time [min]			
through dry	Time [days]	7	5	3
Recoating interval	Minimum	2 h at 25°C	21 h at 5°C	48h at -5°C
	Maximum	Unlimited		
Recommended film thickness	Wet	approx. 160 microns		
	Dry	100 microns		
Theoretical coverage	100 µm dft	6.3 m2/L 3.6 m2/kg		
Shades		Grey		
Gloss		mat		
Solids content	By weight By volume	79 ± 2% 64 ± 2%		
Density	Mixture	1.77 g/ml		
Viscosity	ISO 2431	100 s F6 (20°C)		
Adhesion		ISO: 0 / ASTM: 5B		
VOC content		IIA(i), 500 g/l (2010); product contains: max. 315 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

Before preparing the surface for coating, solvent-clean it to remove contaminants such as oil, grease, salts, dirt and markings. 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 25-50 microns.

Refurbishment of old coatings

Prepare the surface by solvent cleaning to remove contaminants. Use manual cleaning to ISO 8501-1 St 2 or power-tool cleaning to ISO St 3 to remove corrosion and poorly adhering paint and prepare the surface in accordance with the standard. Overlap the edges of sound, well-adhering paint by 5-10 cm with the new paint or primer. Abrade glossy surfaces to provide a profile for adhesion. Apply a test area to verify compatibility between the old and new coatings.

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

We recommend bringing both containers to room temperature before use (20 °C, minimum 15 °C). The mixing ratio is 12 : 1 by weight and the pot life is approximately 8 h (20 °C and normal working conditions). Do not apply the coating after the pot life has expired, as adhesion, drying or gloss problems may occur.

Add component B to component A in the exact specified ratio and mix thoroughly with an electric mixer for 2-3 min at low speed (300-400 min-1). To avoid mixing errors, we recommend pouring the mixture into a clean container and briefly mixing it again.

EPOXYKOLOR VMESNI MIOX can be applied by brush, roller, airless or conventional air spray. Stir thoroughly before application. In opened containers, cover the paint with thinner, seal tightly and use within a short period.

Brush/roller

Brush: Natural fibres

Roller: Natural or synthetic fibre cover

Thinning: 5 % Epoxy thinner

Airless

Pressure: 170-200 Bar

Nozzle: .013-.021

Thinning: 10 % Epoxy thinner

Air spray

Air cap: 1.3 - 2.2 mm

Air pressure: 3.1 - 5.1 bar

Thinning: 5 – 15 % Epoxy 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

Epoxy 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

For finishing over EPOXYKOLOR VMESNI MIOX, one- and two-component varnishes and enamels can be used.

Starkolor Vinilacryl emajl Epoxykolor emajl Purkolor emajl

Cleaning tools and surfaces

Clean tools and equipment immediately after use with Epoxy thinner, acetone or Nitro thinner, 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, connected with or resulting from the use of the products shall in no case exceed the purchase price of the products or the part giving rise to the claim. In no event shall Chemcolor be liable for consequential or incidental damage. Epoxy-based coatings yellow and chalk when exposed to UV. Inadequate mixing, an incorrect mixing ratio, various gases or exposure of partially cured paint to outdoor weather conditions (UV radiation, moisture) may cause a colour change. White and light shades are particularly susceptible to yellowing. RAPID hardeners intensify the yellowing and chalking characteristic of epoxy paints.

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:

- 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.