CHEMCOLOR
protective coatings since 1982

Chemcolor corrosion protection system

Purkolor emajl 2v1

Two-component polyurethane primer and topcoat

Intended use

PURKOLOR EMAJL 2v1 is made from an acrylic binder, an isocyanate hardener, corrosion-inhibiting additives and exceptionally weather-resistant pigments. It is used as a primer and finish to protect agricultural and construction machinery, iron structures, goods vehicles and other metal objects.

Properties Areas of application

- high mechanical, chemical and weather resistance
- very good hiding power
- durability and elasticity of coating film
- quick-drying
- easy application
- primer and finish for protecting agricultural and construction machinery
- where high mechanical, chemical and weather resistance is required.

Technical data*

Packaging	A	25 kg		
	B	5 kg		
Mixing ratio	By weight	A : B	=	5,00 : 1
	By volume	A : B	=	4,35 : 1
Pot life	Temperature	10 °C	20 °C	30 °C
	Time [h]	5	4	2
Application temperature		3°C above the dew point		
Application humidity		Minimum 30 and maximum 85% relative air humidity		
Thinning		PUR THINNER		
Drying time	Temperature [°C]	10 °C 60/560	20 °C 30/300	30 °C 25/240
(dust dry / touch dry)	Time [min]			
through dry	Time [days]	14	10	7
Accelerated drying	Flash-off	20 minutes		
	Conditions	approx. 80°C - 30 minutes		
Temperature resistance	(dry temperature)	150°C – long-term, 200°C short-term		
Recommended film thickness	Wet	approx. 130 microns		
	Dry	80 microns		
Theoretical coverage	80 µm dft	6.42 m2/kg 7.7 m2/L		
Shades		RAL or NCS		
Gloss		Semi-matt, mat		
Solids content	By weight By volume	70 ± 2% 60± 2%		
Density	Mixture	1.20 g/ml		
Viscosity	ISO 2431	80 s F6 (20°C)		
Adhesion		ISO: 0 / ASTM: 5B		
VOC content		IIA(i), 500 g/l (2010); product contains: max. 400 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. Observe the recoating intervals of the primers or intermediate coats 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.

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 5 : 1 by weight and the pot life is approximately 4 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.

PURKOLOR EMAJL 2v1 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% Pur thinner

Airless

Pressure: 170-200 Bar

Nozzle: .013-.021

Thinning: 5-15% Pur thinner

Air spray

Air cap: 1.3 - 2.0 mm

Air pressure: 3.1 - 5.1 bar

Thinning: 10-15% Pur 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

Pur 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.

Cleaning tools and surfaces

Tools and work equipment are cleaned immediately after finishing work with PUR 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

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.

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:

- 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.