TECHNICAL-APPLICATION GUIDE

ColorWest®

EP83 0001

Epoxy paints

2K-Epoxy Ferric Mica Undercoat

Trade name / Product code	**EP83 / 0001**
Material base	Epoxy resin
Glossiness level	Matte
Hardener	**ET02** **ET05, ET27**
Thinner	**S6300**
Hardening ratio Paint : hardener	7 : 1 parts by weight 4.5 : 1 parts by volume **The paint should not be thinned before processing!**
Reaction time	10 minutes after processing.
Pot life, 20 °C	ET02 - max. 4 hours ET05, ET27 - max. 4 hours **Processed mixture must NEVER be used after the lapse of the pot life (4 hours) and should not be mixed with a newly produced mix and vice versa!**

Processing data

Air spraying

Thinner:	S6300
Application viscosity:	20 to 40 s / 4 mm cup DIN / 20 °C
Jet:	1.3 - 1.6 mm
Pressure:	3 - 5 bar

Airless / airmix spraying

Thinner:	S6300
Application viscosity:	25 to 80 s / 4 mm cup DIN / 20 °C
Jet:	0.28 - 0.33 mm airless / E311, E411 airmix
Pressure:	120 - 150 bar airless 80 - 120 bar / 1.8 - 2.2 bar airmix

Roller, brush

Thinner:	S6300
Application viscosity:	20 to 40 s / 4 mm cup DIN / 20 °C

Processing

The minimum temperature of both the base and the hardener before processing should be 10 - 25 °C!
Mix the paint thoroughly after opening the package. When using less than the whole package, weigh the pre-calculated quantity of paint (7 parts of base and 1 part of hardener by weight) or measure parts by volume using the appropriate rule (4.5 parts of base and 1 part of hardener by volume). After mixing both components thoroughly, thin the processed mixture to the viscosity value needed for the specific application with thinner S6300. It is recommended to apply the paint after 10 minutes of processing (reaction time).

Drying times at 20 °C Wet thickness 50 µm

	ET02	ET05, ET27
Dustproof / 20 °C:	50 minutes	30 minutes
Touch dry / non-sticking / 20 °C:	120 minutes	50 minutes
Recoatable / 20 °C:	180 minutes	90 minutes
Workable / 20 °C:	7 hours	3 hours
Final curing time / 20 °C:	7 days	7 days

EP83 0001

Epoxy paints

2K-Epoxy Ferric Mica Undercoat

The rate of cure and achieving the final properties vary depending on the climatic conditions and coat film thickness.

Additional drying temperature: max. 60 °C

Technical data

Colours:	0100, 0110, 0840, RAL as agreed
Supplier viscosity, 20 °C:	thixotropic
Density, base, 20 °C:	1.60 to 1.70 g/cm^3
Density, processed mix, 20 °C:	1.50 to 1.60 g/cm^3
Dry matter content, base:	approx. 79 % by weight
Dry matter content, processed mix:	approx. 75 % by weight approx. 69 % by volume
VOC content, base:	approx. 210 g/kg
VOC content, processed mix:	approx. 250 g/kg approx. 380 g/l

Total organic carbon TOC content, processed mix: 220 g/kg

Theoretical spreading rate:

Dry film thickness 40 µm 10 to 12 m^2/kg

Consumption depends on object shape, surface roughness, and application technique and conditions.

Maximum thinning to 500 g VOC in 1 l of processed and thinned mix

130 g S6300 per 1 kg of processed mix (both hardener ET02 and ET05, ET27).
To Regulation No. 415/2012 Coll.

Application data

Application conditions

Air temperature:	+5 to +30 °C
Base and hardener temperature:	+10 to +25 °C
Object surface temperature:	min. 3 °C above dew point
Relative humidity of air:	max. 70 %
Number of coats:	1 - 2
Wet film thickness:	min. 75 µm recommended: 125 - 150 µm
Dry film thickness:	min. 40 µm recommended: 80 µm

The thickness of a coat applied in a single working step on a vertical surface depends on object shape, surface roughness, and application conditions.

Overcoatability: The paint can be overcoated with the same paint or a suitable top paint.

Second paint coat can be applied “wet on wet” after 40 - 80 minutes.
Top coat can be applied after 3 hours (hardener ET02) or 90 minutes (hardener ET05, ET27) of intermediate coat drying.
If exposed to the effects of polluted environment, the surface should be cleaned thoroughly before next coat application, at best by rinsing with high-pressure clean water, and let dry up.
The maximum period of overcoatability with a top coat is 30 - 50 days; after that, a new prime coat has to be applied in a dry film thickness of 30 – 40 µm.

Application

Intermediate coat with a barrier pigment in the coating systems subject to high corrosion resistance demands (industrial products, steel structures, etc.). In combination with an epoxy corrosion resistant primer and a polyurethane top paint, the coat provides high weather and chemical resistance.

Surface preparation

Metal or mineral surface coated with a suitable primer.

ColorWest®

EP83 0001

Epoxy paints — 2K-Epoxy Ferric Mica Undercoat

Utility properties	The cured coat is resistant to abrasion. **Cross-cut test** (steel): degree 0 to 1 **Temperature resistance:** Long term: 90 °C Short term (max. 60 minutes, dry): 120 °C For more details please contact our technical department.
Cleaning and maintenance	The mixing and application tools should be cleaned as soon as possible with thinner C6000 or S6300.
Packages	1 kg to 200 kg metal packages as agreed.
Shelf life	Paint - 24 months; hardener - 6 months from the date of manufacture if kept in the original closed packages in a dry room, out of direct sunlight and at a temperature from +5 to +25 °C. The storage areas should meet all the conditions for storage of hazard class II combustibles.
Documentation	Technical Application Guide Material Safety Data Sheet
Disclaimer	The product data provided in this Technical Application Guide results from the current level of production, laboratory and application tests. The manufacturer reserves the right to make revisions according to the state of development. As the product is used frequently beyond our control, we cannot guarantee anything else than the quality of the product as such. We are not liable for any mistakes occurring due to wrong application, application past the shelf life or improper storage. This document only provides non-binding information that has to be concretized by the end user for the specific product type. On no account this document supersedes the identification data of this product specified in the material safety data sheet.
Date of issue **Revision date**	19. 10. 2015 18. 01. 2018

Before starting works with this product, ALWAYS read thoroughly the relevant material safety data sheet and the material safety data sheets of the applicable hardener! Observe the safe handling and occupational safety instructions.

For more detailed information please contact our technical department.