

# TECHNICAL DATA SHEET

Article No.: EP113

## EP – POLYESTER-EPOXY POWDER COATINGS

**Symbol:** EP113/0/0243/08

**Color:** RAL 1034

**Surface:** Smooth

**Gloss level:** Semi-matt

**Characteristics:**

- Indoor, industrial application, including the avoidance of exposing the coating to direct sunlight through glass
- High flow
- Very good covering power
- High decorative and protective effect
- Very good mechanical resistance

**Applications:** Metal furniture, shelves elements, shop fitting, tools and equipments, wire products, etc.

**Powder properties:**

<b>Particle size</b> (Malvern)	Fine powder suitable for electrostatic spray (corona) and tribocharging (tribo) <10µm: <=19% <122 µm: 97-100%
<b>Density (g/cm<sup>3</sup>)</b> ISO 8130-2	1,677

**Theoretical coverage (m<sup>2</sup>/kg):** ~7 by the film thickness 80 µm and 100 % use of powder coating.

**Thickness:** recommended 80-100µm  
ISO 2808

**Application:**

- Electrostatic gun - corona (recommended voltage - 60 kV) or tribo gun.
- Application parameters depend on the geometric shapes of the detail and the film thickness to be reached.
- Responsibility for the correct application parameters lies on the coating applicators.
- Despite careful production methods, slight deviation of color and effect between the different manufacturing batches may occur (typical for powder coatings).
- Various application parameters may cause color/effect changes.
- Proper grounding of application equipment and coated elements helps to keep repeatability of the obtained color/effect.
- It is recommended to do the entire order on the same equipment, with the same application parameters
- Not be mixed with other powder coatings.
- Control the air speed during application of powder coatings.
- Keep the appropriate distance: the gun - coated elements.
- Keep a uniform thickness of coating.

**Packaging:**

- 20/25 kg cardboard box
- 450/500 kg Big Bag
- Other packaging variations are available on request.

- Curing conditions:**
- Curing time recommendation in a convection oven:  
**200°C/10min.**  
**190°C/12min.**  
**180°C/20min.**  
 (object temperature)
  - Must be strictly observed parameters of stoving the coating film to ensure that the full mechanical and chemical properties.
  - Suitability of the product for stoving in gas ovens and radiant ovens should be verified - may be a significant difference in color - perform a comparative test with the standard color (please contact us for details).

- Surface pretreatment:**
- The overall quality of the coating film depends on the type and quality of the pretreatment.
  - Surfaces must be dry, degreased and free from rust and other contaminants.
  - In order to improve coating adhesion to the surface and improve resistance it is recommended:  
 aluminium - chromating, chrome-free pretreatment or anodic pretreatment.  
 Steel and galvanized steel - individual choice of surface pretreatment (e.g. phosphating).
  - However, in order to achieve optimum results, you must follow the instructions and recommendations of the pretreatment material manufacturer.

**Coating film:**

Tested in laboratory conditions on: steel panel

<b>Gloss (60°)</b> ISO 2813 <sup>1</sup> VISUAL <sup>2</sup>	40 ±5 GU
<b>Cross cut</b> ISO 2409	0
<b>Mandrel bending</b> ISO 1519	<5 mm
<b>Erichsen cupping</b> ISO 1520	>5 mm
<b>Impact resistance</b> ISO 6272-1	front >50 kg/cm reverse >50 kg/cm
<b>Buchholz hardness</b> ISO 2815 <sup>3</sup>	>80
<b>Pencil hardness</b> ISO 15184 <sup>3</sup>	3H

<sup>1</sup> applies to smooth and no metallic coatings film

<sup>2</sup> applies to structural and metallic coatings film

<sup>3</sup> not applicable structural coatings film

- Approvals:**
- The powder coatings are in compliance with 2011/65/EC and 2015/863/EC (so called ROHS).
  - Heavy metal free.

- Post treatment of coated parts:**
- To print, to glue, to label, to laminate with foil, over-coating or any other post-treatment, some preliminary testing is recommended.
  - Powder-coated details should be packaged after being completely cooled down to ambient temperature, into appropriate packaging materials previously tested by the user.
  - Packaged details should be stored under cover to avoid condensation, which may result in traces on the finished coating.



<b>Storage:</b>	<b>Storage instruction:</b>	In the original containers, keep away from heat sources, in the temperature of 5 – 25°C, protect from moisture. The product should stay at ambient temperature (paint shop) 12h before use.
	<b>Storage life:</b>	24 months, in accordance with the expiry date indicated on the product label.
<b>Technical recommendations:</b>	- In the case of cleaning powder coated surfaces it is necessary strict compliance with the Technical recommendations 01: Cleaning of powder coated surfaces.	
<b>Safety Data Sheet:</b>	POLYESTER-EPOXY POWDER COATINGS EP 3/4/5, EP 3/4/5/FP - TI	
Comments:	The above values may vary depending on the type of surface pretreatment, color, gloss, texture, etc. All informations included in this card are based on our experience and actual knowlegde and do not release the user from carrying out their own tests. If in doubt please contact us for details. Having no influence on the use and application conditions, we can take responsibility only for the quality of any the product and ensure that it fits to our standards. This Technical Data Sheet is revised periodically. KABE Powder Coatings reserves the right to change specifications without notice. If necessary, our sales department will confirm the validity of this document.	
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