



Epoxy glass coating

Ideal for the coating of perfume and cosmetic bottles

- **Good resistance to household chemicals and perfumes** - protects against alcohols, oils, and cosmetic formulations.
- **Smooth surface finish** - allows for glossy, uniform appearance after spraying or dipping.
- **Excellent adhesion to glass substrates** - ensures long-lasting coating performance.
- **Mechanical durability** - resistant to handling, abrasion, and minor impacts.
- **High transparency and color brilliance** - maintains the optical quality of the substrate, ideal for decorative coatings.

Formulation

Component A

Raw material	Function	Supplier	wt. %	Production
Epilox L 50-54	Epoxy binder	LEUNA-Harze	75,0	<i>Charge the binder first. Add the raw materials under the dissolver at a circumferential speed of approximately 5 m/s, and continue mixing for at least 5 minutes to ensure homogeneous mixing.</i>
PAT-ADD SL 1120	Slip and leveling additive	PATCHAM	0,50	
PAT-ADD LE 1019	Levelling agent	PATCHAM	0,20	
PAT-ADD AF 70	Defoamer	PATCHAM	0,30	
MACROLEX YELLOW 6G GRAN	Solvent dye	LANXESS	1,50	
Q-SIL GLYMO	Adhesion promoter	OQEMA	2,50	
Butyl acetate	Viscosity adjustment	OQEMA	20,0	

Component B

Raw material	Function	Supplier	wt. %	Production
Epilox-hardener H 10-25	Epoxy hardener	LEUNA-Harze	50,0	<i>Mix the hardener and the solvent under slow stirring for at least 5 minutes.</i>
Xylene	Viscosity adjustment	OQEMA	50,0	

Mixing ratio (Comp. A : Comp. B) = 100 : 80

(by weight, including full solvent addition with xylene / butyl acetate)



Technical Data

Property	Test method	Result
Density – Comp. A	DIN EN ISO 2811-1	1,03 g/cm ³
Density – Comp. B	DIN EN ISO 2811-1	0,92 g/cm ³
Flow time (4 mm flow cup)	DIN EN ISO 2431	32 s
Non-volatile content (105 °C / 24 h)	DIN EN ISO 3251	45 %
Application time (at 20 °C / small batch / dip coating)	Internal method	~ 90 min
Tack free time (at 20 °C / 50 % r.h.)	Internal method	~ 90 min
Full cure time (at 20 °C / 50 % r.h.)	Internal method	~ 7 d
Cross-cut (on glass as dip coating)	DIN EN ISO 2409	0 = very good adhesion
Scratch resistance (on glass as dip coating)	DIN EN ISO 1518-1	9 N
Water resistance (7 d)	DIN EN ISO 2812-1	No defects
Ethanol resistance (48 h)	DIN EN ISO 2812-1	No defects
Solvent naphtha resistance (48 h)	DIN EN ISO 2812-1	No defects
Gloss (20° / 60° / 85°) (yellow version as dip coating)	DIN EN ISO 2813	150 / 140 / 110 GU
Colour shade	Visual comparison	Yellow-transparent (other colours available by pigment addition)

Application instructions for end users

Preparation of the substrate

- Ensure that the glass surface is completely clean, dry, and free from dust, grease, or release agents.
- For best adhesion, pre-clean with suitable solvents (e.g. isopropanol) and avoid touching the surface with bare hands after cleaning.

Mixing

- Combine **Comp. A and Comp. B in a mixing ratio of 100 : 80** (by weight, including full solvent addition with xylene / butyl acetate)
- Mix thoroughly for 3–5 minutes at low to medium speed until a homogeneous mixture is achieved.
- Avoid excessive air incorporation during mixing.



Dilution (if required)

- Adjust viscosity with the recommended solvent blend to suit the chosen application method (spraying or dipping).

Application

- Apply by **conventional spray gun** or **dipping process**.
- The recommended wet film thickness depends greatly on the desired optical effect and coverage.
- Ensure uniform coating to avoid streaks or color variations.

Application time

- The mixed coating remains usable for approx. 90 minutes at 20 °C.
- An increased outside temperature and a large batch size (→ exothermic effects) can significantly reduce this time.
- Only prepare the amount that can be applied within this period.

Drying & curing

- A higher air exchange rate in the first approx. 15 minutes increases the drying speed, as this allows the solvents to evaporate more quickly.
- If the coating cured at a higher temperature, the curing speed is significantly increased.
- Final properties develop after complete curing.

Cleaning

- Clean all tools and spray equipment immediately after use with suitable organic solvents (e.g. butyl acetate, xylene).
- Hardened material can only be removed mechanically.

Safety instructions

- Epoxy resins and amine hardeners may cause skin sensitization and irritation. Avoid direct contact with skin and eyes.
- Wear protective equipment: suitable chemical-resistant gloves, safety goggles, and protective clothing.
- Ensure good ventilation in the workplace. Avoid inhaling vapors and spray mist. Use appropriate respiratory protection if necessary.
- Keep away from open flames, sparks, and sources of ignition. The solvents are flammable.
- Do not eat, drink, or smoke while handling the product.
- Dispose of any waste material and contaminated containers according to local regulations.
- For detailed hazard and precautionary statements, refer to the material safety data sheet (MSDS).

Storage instructions

- Recommended storage temperature: **5–30 °C**, in a dry, well-ventilated area. Protect from frost, heat, and direct sunlight.
- Keep containers away from open flames and other sources of ignition.



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- Shelf life under proper storage conditions: typically **6-12 months** from date of manufacture.
- The addition of GLYMO reduces storage stability because its reactive silane groups can prematurely undergo hydrolysis and condensation during storage. To increase storage stability, GLYMO can be added shortly before mixing.
- Once opened, reseal containers immediately and use contents as soon as possible.
- Do not store near foodstuffs, beverages, or animal feed.

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