

# KLB-SYSTEM EPOXID EP 740 E

Coloured 2-Component Epoxy-Resin Seal

Mixing Ratio	Parts by weight:	A : B = 1 : 5		
	Parts by volume:	A : B = 1 : 4,15		
Application	Temperature	15°C	20°C	30°C
	Time	80 mins.	70 mins.	60 mins.
Working temperature		minimum 15°C (room- and floor- temperature)		
Setting	Temperature	15°C	20°C	30°C
	Time	24 - 36 hrs.	18 - 24 hrs.	14 - 18 hrs.
Hardening	Mechanical	2 -3 days for exposure to mechanical forces at 20°C		
	Chemical	7 days for resistance to chemicals at 20°C		
Further coatings		after 14 - 18 hours, but not later than 48 hours at 20° C		
Consumption		0.25 - 0.35 kg/m <sup>2</sup> per coat		
Coats		normally two coats		
Coat thickness		0.3 - 0.7 mm in two coats		
Colours		12 KLB standard colours, other colours on request		
Packaging		Combi-can 10 kg, Combi-Hobbock 25 kg		
Shelf life		12 months (in original, sealed packaging) - protect from frost !		

## Description and Properties

**KLB SYSTEM EPOXID EP 740 E** is a 2-component, water-emulsified, pigmented epoxy-resin seal.

**EP 740 E** is mainly used a seal on concrete, cement screeds, magnesia screeds and mastic asphalt, as well as for the renovation of existing surfaces as it has excellent adhesion to a wide range, including existing substrates.

The product is easy to apply by roller, has high coverage capacity and, due to its composition, is pleasant to use and environmentally friendly. In two coats, a durable and visually appealing flooring seal can be produced.

The product sets by drying and chemical reaction to a robust and resistant film with excellent adhesion. **EP 740 E** produces a tough and highly abrasion-resistant film that is physiologically harmless, has good resistance to liquid solutions, dilute acids and alkalis, as well as motor- and fuel-oils. Its moisture vapour permeability allows the sealing of water-sensitive substrates and those with high moisture content. **EP 740 E** produces a silk-gloss surface finish.

## Product Features

- environmentally friendly
- pleasant to apply
- low odour
- attractive appearance
- moisture vapour permeable
- excellent adhesion
- consistent surface finish
- excellent covering capacity

## Areas of Use

- **EP 740 E** is used as a seal on concrete, cement- and anhydrite- screeds, mastic asphalt and magnesia surfaces
- as a seal on moisture vapour permeable coatings such as **EP 785 HS**
- as a seal or thin coating in interior locations such as, e.g. commercial and industrial areas, cellars, garages, loading bays, etc.
- for surface finishing on existing epoxy-resin coatings
- vertical surfaces and walls

## Finisch Construction

- abrade the surface and thoroughly vacuum off
- highly absorbent surfaces also require impregnation with **EP 720 E** diluted 1:1 with water
- apply the first seal-coat of **EP 740 E** diluted with 5 – 10% of water using a nylon roller
- apply the second seal-coat of **EP 740 E** with a nylon roller in the opposite direction to the first

## Substrate

The surface to be coated must be flat, dry, dust-free, have adequate tensile and compressive strength and be free from constituents and finishes that would impair adhesion. Remove contaminants such as grease, oil and paint residues using suitable methods. Refer to the notes issued by the trade associations, e.g. the current versions of BEB worksheets KH-0/U and KH-0/S. The surface to be coated must be mechanically prepared; especially suitable for seal-coats are diamond sanders as they produce a smooth surface finish. The shot-blast method can be used, after which a scratch-coat with EP50 / KLB Mixing Sand 2/1 (1:0.5 parts by weight) will be necessary.

On existing surfaces, before mechanical preparation, cleaning must be carried out. If old synthetic resin surfaces are to be sealed, it must be determined by testing that adequate adhesion can be achieved. If in doubt, conduct a trial.

## Mixing

With combi-cans, factory-measured material in the precise mixing ratio is provided in one package. The can containing Component B is large enough to accept the total mix quantity. Fully decant component A into the can of resin. Blend mechanically with a slow-speed mixer (200 – 400 rpm) and for 2 – 3 minutes until a homogeneous, streak-free mixture is achieved. To avoid mixing errors, we recommend to pour the mixed resin into a clean drum and briefly mix again.

The application time must be maximum 1 hour. For part quantities, the components should be stirred well and measured out in the correct mixing ratio.

**Caution:** the pot-life can then not be estimated!

## Application

As with all reaction resins, application should commence immediately after mixing. Application is with a lint-free mohair or velour varnish roller with a wipe-off grid.

Normally, working areas should be set out in advance so as to avoid repeated applications and random overlapping. In larger areas, it is recommended that two or more

people carry out the application. In this way, one or more person(s) apply the material in one direction and another person takes over the distribution crossways (at a 90° angle) of the freshly laid seal material.

On larger areas, a 50 cm wide roller should be used. The distribution roller should be soaked in the material and should only be used for distribution, never for application of the seal. Always work "fresh-in-fresh" and ensure optimum distribution. Always avoid pooling as this may result in streaks.

Check the climatic conditions and, after application, ensure adequate drying conditions and ventilation. Do not apply at below 15°C room- or floor- temperature and above 75% rel. humidity. The temperature difference between floor- and room- temperature should be less than 3°C, so that drying is not affected. In the event of a dew-point situation, correct drying cannot take place, the setting process will be interrupted and spots will form.

To remove fresh contamination and to clean tools, use water immediately after use. Hardened material can only be removed by mechanical means or with VR 28 Thinners

## Storage / Transport

Store in dry and frost-free conditions. Ideal storage temperature is 10 – 20 °C. Before application, bring to a suitable working temperature. Tightly re-seal opened containers and use the contents as quickly as possible.

The product falls outside the hazardous materials-, operational safety- and transport- regulations for hazardous goods. The relevant notes are in the DIN Safety Data Sheet. Refer to the label notes on the container!

GISCODE: RE 0

# KLB-SYSTEM EPOXID

## EP 740 E

Coloured 2-Component Epoxy-Resin Seal

### Technical Data\*

Viscosity	Comp. A+B	1050	mPas	DIN EN ISO 3219 (23°C)
Solid state		> 63	%	TP OS 3.6 / DIN EN ISO3251
Flashpoint		non-flammable	kg/litre	DIN 51755
Density	Comp. A+B	1.32		DIN EN ISO 2811-2 (20°C)
Abrasion resistance (Taber)		< 70	mg	ASTM D4060
Diffusion resistance factor		3100	-	DIN EN ISO 12572
Diffusion equiv. air layer thickness (0.5mm)		1.6	-	DIN EN ISO 7783-2
Gloss value [85°]		10 - 15	-	DIN 67530

(\* values achieved in sampling are average values. Variations from the product specification are possible)