

KLB-SYSTEM EP 52 RAPID

Moisture compatible, rapid setting, 2-component epoxy resin special primer

Mixing Ratio	parts by weight	A : B	=	100 : 50
	parts by volume	A : B	=	100 : 55
Application	Temperature	10 °C	20 °C	30 °C
	time	30 mins.	15 mins.	10 mins.
Working temperature		minimum 5 °C (room- and floor- temperature)		
Setting	Temperature	10 °C	20 °C	30 °C
	time	8 - 10 hrs.	4 - 6 hrs .	3 - 4 hrs.
Hardening	mechanical	1 - 2 days for exposure to mechanical forces at 20°C		
	chemical	7 days for chemical resistance at 20°C		
Further applications		whilst still wet or when hardened (4 – 6 hours) but not later than 24 hours at 20° C		
Consumption	Primer	ca. 0.3 - 0.4 kg/m ²		
	Scratch-coat	ca. 0.4 - 0.6 kg/m ²		
Packaging		Combi-can 10 kg, Combi-Hobbock 30 kg		
Shelf life		12 months (in original sealed containers)		

Description and Properties

KLB-SYSTEM EPOXID EP 52 RAPID is a rapid setting, solvent-free, 2-component epoxy resin formulated to be extremely compatible with moisture. **EP 52 RAPID** will bond to matt-damp surfaces, displacing the water and providing exceptional adhesion. As a variant of the proven special resin primer **EP 52**, the product is rapid setting and combines good adhesion and wetting properties with early readiness for over-coating after only 4 – 6 hours.

KLB-SYSTEM EPOXID EP 52 RAPID is suitable for use as a primer on problem substrates at temperatures from 5 °C. The product is primarily for use on concrete and cement screeds where there is a need for rapid setting and good adhesion. Its medium viscosity makes the product also suitable for use as a scratch-coat and as a wet bonding-agent for bonded screeds. With **EP 52 RAPID**, excellent adhesion is achieved on shot-blasted steel.

Product Features

- rapid setting
- very high adhesion power
- surface hardening
- universal use
- resistant to hydrolysis and saponification
- cures on matt-damp surfaces
- solvent-free

Areas of Use

- priming prior to coating installation on matt-damp and wet, chemically cleaned surfaces
- as a rapid setting bonding-agent primer
- case-hardening of weak substrates
- scratch-coating for surface sealing and smoothing

Substrate

The substrate to be coated must be level, dry, dust-free, have adequate compressive and tensile strength and be free from weakly bonded materials and surface sections. Materials that will impair adhesion, such as grease, oil and paint residues, must be removed using suitable processes. Suitable for coatings are concrete B 25 (C 20/25), cement screeds ZE 30 (CT - C 35 - F5) and other adequately sound substrates. Substrates must have adequate strength for the intended type of use. Due to the case-hardening effect, significant improvement of adhesive tensile strength can be achieved on substrates that have insufficient strength (however, a trial area should be carried out). The coating of mastic asphalt with epoxy resin is not recommended. The surface to be coated must be mechanically prepared, preferably by shot-blasting. The surface strength must then be at least 1.5 N/mm². The moisture in concrete must not exceed 6.5 CM-%. The possibility of retrospective ingress of moisture must be permanently excluded. Under certain conditions, **EP 52 RAPID** can be applied on damp substrates and surfaces that are not adequately dense. Suitability for particular conditions should be clarified before use. Please refer to the current editions of the recommendations of the trade associations, e.g. BEB work-sheets KH-0/U and KH-0/S. Results in the case of refurbishment of flooring outside the usual, standard requirements require verification, e.g. by adhesion testing.

Mixing

With individual packaging of the components, they are exactly measured in the prescribed mixing ratio. With combi-cans, factory-measured material in the precise mixing ratio is provided in one package. The can containing Component A is large enough to accept the total mix quantity. Fully decant the hardener into the can of resin. Blending mechanically with a slow-speed mixer (200 – 400 rpm) should be for 2 – 3 minutes until a homogeneous, streak-free mix is achieved. To avoid mixing errors, it is recommended to empty the mixed resin/hardener into a clean container and then mix briefly once again.

Producing scratch-coats and mortars

1.0 kg KLB-SYSTEM EPOXID **EP 52 RAPID**
0.5 – 0.8 kg KLB sand aggregate 2/1

With the addition of aggregates, the resin must be mixed first, then the aggregate is added. The quantity of sand is determined according to the required consistency and strength.

Application

Primer: application as a primer is carried out immediately after mixing using a rake, trowel or nylon roller. Apply the material as a consistent and sealed coat onto the surface and roll out as required. On highly absorbent surfaces, a second coat or a full scratch-coat is recommended to achieve a fully sealed finish. For optimum adhesion, the surface should be gritted whilst still fresh with approx. 0.8 kg of quartz sand (grain size 0.3/0.8). This is essential if the subsequent coating will be applied later than 24 hours after the primer.

Scratch-coat: for smoothing and to fully seal the surface, before application of the top coating, a scratch-coat is recommended. This can be applied by trowel or with a metal or rubber squeegee. The consistency of the mix must be adjusted according to the substrate absorbency and must be such that the material flows without leaving trowel marks.

The temperature of floor and air must not fall below 5 °C and/or the air humidity must not be above 70%. The temperature difference between floor and air must be less than 3 °C so as not to disturb setting. In the event of a dew-point situation, proper hardening cannot occur, setting will be disturbed and there will be formation of surface spots. The prescribed setting times apply at 20 °C; at low temperatures, the working- and setting- times are extended and, where temperature increases, they are shortened.

Cleaning

To remove fresh contamination and for cleaning of tools, use thinners **VR 24** or **VR 33** immediately. Hardened material can only be removed by mechanical means.

Storage / Transport

Store in dry and, if possible, 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.

Special Note

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 1



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EN 13813-SR-B1,5-AR1,0-IR5

KSynthetic resin screed mortar / coating for interior use, construction according to Product Information

Flammability:	NPD
Emission of corrosive substances:	SR
Water permeability:	NPD
Wear resistance to BCA:	AR 1.0
Adhesive tensile strength:	B 1.5
Impact resistance:	IR 5
Impact sound insulation:	NPD
Acoustical absorption:	NPD
Thermal insulation:	NPD
Chemical resistance:	NPD

NPD = No Performance Determined

Technical Data*

Viscosity	Components A+B	950	mPas	EN ISO 3219 (23 °C)
Solids content		>99	%	KLB factory standard
Density	Components A+B	1.08	kg/litre	EN ISO 2811-2 (23 °C)
Weight Loss		0.3	% by weight (after 28 days)	
Water Absorption		< 0.2	% by weight DIN 53495	
Tensile Bending Strength		> 25	N/mm ²	DIN EN 196/1
Compressive Strength		> 70	N/mm ²	DIN EN 196/1
Shore Hardness		82	–	DIN 53505 (after 7 days)
Adhesive Tensile Strength		>1.5	N/mm ²	DIN EN ISO 1542

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

Details are based on our experience and practical testing. We guarantee the perfect quality of our products, but cannot accept responsibility for the success of your completed work as we have no influence on the application and application conditions. It is recommended, in individual cases, to prepare a test surface. In addition, our "General Conditions of Trade" apply. The publication of this, new Data Sheet invalidates all preceded information.

