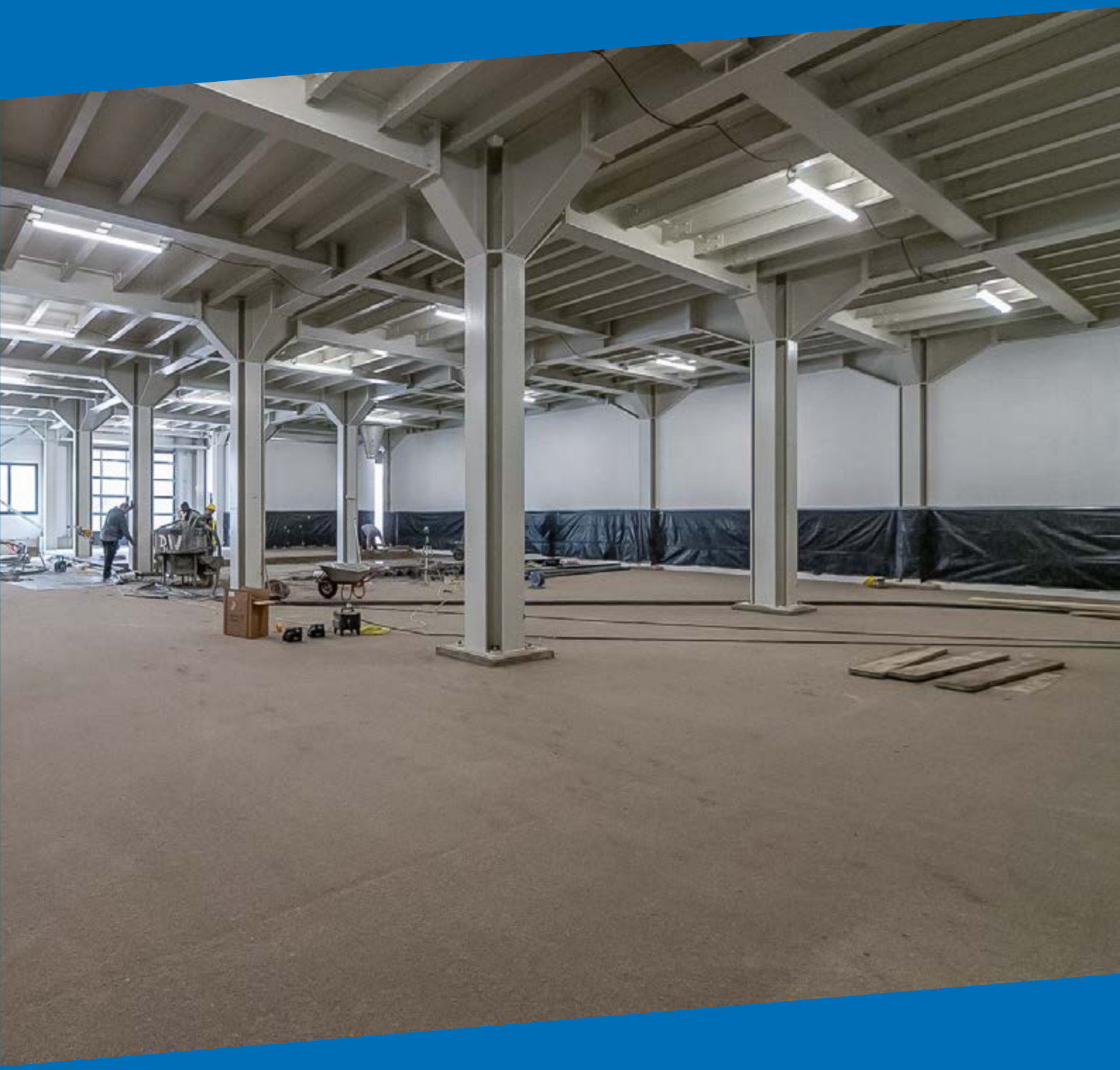
KLB KÖTZTAL

KLB reactive resins for screed professionals

Sustainable quality, built to last.



KLB KÖTZTAL

Content

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KLB REACTIVE RESINS FOR SCREED WORK

Modern screeds must deliver more than ever. Today's flooring systems are subject to increasingly complex demands – especially in high-load areas, where performance and reliability are non-negotiable. In such settings, technically advanced and environmentally conscious synthetic resin binders offer the ideal solution. They enable the installation of safe, long-lasting floors and serve as the perfect complement to traditional screed systems.

KLB synthetic resin binders are defined by their outstanding technical performance, resource-efficient production, and exceptionally low emissions – both during installation and over their service life. They strike the perfect balance between performance and sustainability, setting a new benchmark for modern screed technology.

What this means for you as a screed or flooring professional: You benefit from products that are easy to work with, yet deliver exceptional strength, durability and long-term performance.

Choose solutions that make your work more efficient and leave a lasting impression on your clients.

LAYING THE GROUNDWORK FOR DURABLE SCREEDS

1.

Primer, adhesion primer and barriers for residual moisture

KLB-SYSTEM EPOXID EP 50, EP 52 Spezialgrund, EP 53 Spezialgrund-AgBB, EP 58 and EP 724 E Haftgrund Super

The long-term adhesion of bonded screeds depends heavily on the condition and surface profile of the substrate. In cases where substrate strength is uncertain, where dense or high-strength concrete is present, or where surfaces are contaminated with organic substances, achieving reliable adhesion can be a challenge. This is where specialised epoxy resin bonding agents come into play. They enable the construction of durable bonded screeds with service lives extending over several decades.

After substrate preparation – typically by milling and shot-blasting (or, in some cases, shot-blasting alone) – the screed is applied fresh-in-fresh into the epoxy resin adhesion primer. Here, the curing behaviour of the epoxy resin, precisely matched to the hardening rate of the mortar, is critical to ensuring a lasting bond.

With our high-performance synthetic resin systems, you benefit from reliable adhesion, protection against long-term moisture issues, and lay a solid foundation for durable, resilient flooring. Depending on the substrate condition, it may be advisable to prepare and assess trial areas on site.

KLB-SYSTEM EPOXID EP 724 E Haftgrund Super

Low-emission 2-component epoxy resin primer for special substrates: Low-emission 2-component epoxy resin primer, water-based, with a wide range of adhesion properties on new and old substrates (metal, ceramics, old coatings, etc.) Suitable as primer and scratch coat also on vapour-permeable coverings, such as EP 785 HS. Can be diluted with water depending on the application. EC1 PLUS certified.

Consumption	Primer: approx. 0.200 - 0.400 kg/m² Scratch coat: approx. 0.800 - 0.900 kg/m² Mortar: approx. 0.800 - 0.900 kg/m²
Mixing ratio	A : B = 1 : 8 l parts by weight
Curing time	at 20 °C / 86 °F 8 - 12 hours
Density (A + B)	1.80 kg/l
Packaging unit (net)	Combo packaging 9.00 kg Combo packaging 18.00 kg

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-724-e-haftgrund-super/

KLB-SYSTEM EPOXID EP 50

All-purpose 2-component epoxy resin, priming and building resin: Solvent-free, non-pigmented, all-purpose 2-component epoxy resin for producing primers and scratch coats as well as mortar and levelling layers.

Consumption	Primer: approx. 0.3 - 0.4 kg/m² Scratch coat: approx. 0.4 - 0.6 kg/m²
Mixing ratio	A : B = 2 : 1 l part by weight
Curing time	at 20 °C / 86 °F 6 - 8 hours
Density (A + B)	1.10 kg/l
Packaging unit (net)	Combo can 1.00 kg, Bucket combo 5.00 kg, Bucket combo 10.00 kg, Hobbock combo 30.00 kg, Drum combo 600.00 kg | Drum combo : 2x200 kg Comp. A / 1x200 kg Comp. B

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-50/

Adhesion primer

KLB-SYSTEM EPOXID EP 52 Spezialgrund

Moisture-tolerant special primer: Solvent-free 2-component epoxy resin primer with very good wettability and adhesion properties as well as high moisture tolerance. Particularly suitable for damp and problem substrates (fresh concrete), or after de-oiling concrete. Adhesion primer for composite concrete. Tested against rear-side moisture ingress – 365 days.

Consumption	Primer: approx. 0.3 - 0.4 kg/m² Scratch coat: approx. 0.4 - 0.6 kg/m² Mortar: approx. 0.150 - 0.300 kg/m² per 1 mm of layer thickness Adhesion primer for composite screeds: approx. 0.8 - 1.0 kg/m²
Mixing ratio	A : B = 100 : 60 l parts by weight
Curing time	at 20 °C / 86 °F 12 - 15 hours
Density (A + B)	1.08 kg/l
Packaging unit (net)	Combo can 1.00 kg, Bucket combo 10.00 kg, Hobbock combo 30.00 kg, Drum combo 960.00 kg | Drum combo: 3x200 kg Comp. A / 2x180 kg Comp. B

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-52-spezialgrund/

KLB-SYSTEM EPOXID EP 58

Very low-emission, AgBB-tested 2-component epoxy resin primer: High-quality 2-component epoxy resin primer, extremely low-emission and suitable for recreation rooms Can be used as a primer and scratch coat prior to the application of epoxy or polyurethane resin coatings – but also for producing reactive resin mortars. Certified with Eurofins "Indoor Air Comfort Gold" and the EMICODE EC1 PLUS label. Protecting against radon exposure from the substrate.

Consumption	Primer: approx. 0.250 - 0.400 kg/m² per application Scratch coat: approx. 0.400 - 0.600 kg/m²
Mixing ratio	A : B = 100 : 37 l parts by weight
Curing time	at 20 °C / 86 °F 14 - 18 hours
Density (A + B)	1.10 kg/l
Packaging unit (net)	Combo can 1.00 kg, Bucket combo 10.00 kg, Hobbock combo 30.00 kg, Drum combo 550.00 kg | Drum 2x200 kg Comp. A / 1x160 kg Comp. B

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-58/

Adhesion primer

KLB-SYSTEM EPOXID EP 53 Spezialgrund-AgBB

Low-emission, moisture-tolerant special primer: Low-emission, AgBB-tested 2-component epoxy resin with high moisture tolerance and particularly good wettability properties. Suitable for damp and problem substrates, after de-oiling concrete and as adhesion primer on metal, similar to EP 52 Spezialgrund. Tested against rear-side moisture ingress – 365 days.

Consumption	Primer: approx. 0.3 - 0.4 kg/m² Scratch coat: approx. 0.4 - 0.6 kg/m² Barrier coat: approx. 0.8 - 1.0 kg/m² in 2 layers
Mixing ratio	A : B = 100 : 50 l parts by weight
Curing time	at 20 °C / 86 °F 12 - 15 hours
Density (A + B)	1.08 kg/l
Packaging unit (net)	Combo can 1.00 kg, Bucket combo 10.00 kg, Hobbock combo 30.00 kg, Drum combo 600.00 kg | Drum combo: 2x200 kg Comp. A / 1x200 kg Comp. B

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-53-spezialgrund-agbb/

RESIN INJECTION – FOR CRACK-FREE FLOORS

Our reactive resins, **KLB-SYSTEM POLYURETHAN PU 1900 ECO** and **KLB-SYSTEM EPOXID EP 1270**, offer highly effective solutions for crack repair.

2.

Crack sealing and rail fixing – faster than ever

KLB-SYSTEM POLYURETHAN PU 1900 ECO

KLB-SYSTEM POLYURETHAN PU 1900 ECO is a 2-component adhesive designed for renovation work, crack repair and bonding on concrete – a truly versatile product and an all-rounder on the job site. This compact assistant stands out for its ease of use for sealing cracks, fixing rails, and achieving fast results thanks to its short curing time. Thanks to its particularly good penetrative properties and wettability, **PU 1900 ECO** is suitable for critical substrates and extremely tolerant to moisture.

KLB-SYSTEM POLYURETHAN PU 1900 ECO	
2-component adhesive for renovations, cracks and concrete, rapid-setting: Very reactive 2-component polyurethane special resin for the quick renovation of screed cracks. Can also be used as a joint sealer, or for bonding structural elements.	
Consumption	Grout volume approx. 1.25 kg/l
Mixing ratio	A : B = 13 : 12 l parts by weight
Curing time	At 20 °C / 86 °F : approx. 45 - 60 min.
Density (A + B)	1.25 kg/l
Packaging unit (net)	Combo packaging 0.50 kg

www.klb-koetztal.de/en/produkt/klb-system-polyurethan-pu-1900/

It's an essential addition to any toolbox, ensuring you're prepared for any challenge the construction site may present. Available in a convenient 0.5 kg combo pack with adjustable nozzle tips.

Secure bond, no cracks

KLB-SYSTEM EPOXID EP 1270

KLB-SYSTEM EPOXID EP 1270 is a low-viscosity epoxy resin that is highly suitable for force-fit grouting of hollow layers and cracks, particularly deep and fine cracks by injection.

Because of its good wettability properties, it penetrates reliably into pores or capillaries and cures without shrinkage – even at low temperatures. (Processing temperature Minimum 5 °C / 68 °F).

KLB-SYSTEM EPOXID EP 1270	
Low-viscosity 2-component injection and priming resin: Solvent-free, low-viscosity 2-component epoxy resin with good wettability properties. Excellent for impregnating and grouting cracks by injection.	
Consumption	approx. 1.1 kg resin / 1 l volume
Mixing ratio	A : B = 100 : 46 l parts by weight
Curing time	at 20 °C / 86 °F : 24 - 36 hours
Density (A + B)	1.10 kg/l
Packaging unit (net)	Combo can 1.00 kg Bucket combo 10.00 kg Hobbock combo 30.00 kg

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-1270/

Both products are easy to apply and provide a reliable, long-lasting solution for quick screed and concrete repairs. With **PU 1900 ECO** and **EP 1270**, you have the right products for any challenge – efficient, dependable, and practical.

COMPENSATION AND REGULATION OF RESIDUAL MOISTURE

3.

Mineral levelling compounds for screed and concrete substrates

KLB-SYSTEM EPOXID EC 610 C and EC 633 C

When screeds or concrete fail to meet the required height or show significant unevenness, levelling with synthetic resin mortar was traditionally a time-consuming task.

Thanks to the self-levelling filler compound **KLB-SYSTEM EC 633 C** and especially**KLB-SYSTEM EPOXID EC 610 C**, which is based on innovative ECC hybrid technology for creating a vapour-compensating intermediate layer, levelling work on critical substrates can now be carried out quickly and cost-effectively. Already the next day, our coating systems can be applied directly onto the levelled surface using the system primer EP 724 E.

What should be considered?

- The substrate must be clean, load-bearing, and free from loose particles.
- Leave edge insulation strips in place during installation, or add them where required!
- Joints in the screed should either be isolated with rails or, preferably, filled with resin and re-cut promptly after curing!
- Always adhere to the recommended processing temperature and the permissible residual moisture content in the screed. Choosing the right levelling product is essential: Low-emission products, such as our 3-component epoxy-cement levelling layer, deliver not only strong technical performance but also environmental benefits. With proper substrate preparation, moisture can be effectively managed, providing a stable, long-lasting base for subsequent flooring systems.

KLB-SYSTEM EPOXID EC 610 C

Rapid-setting 3-component epoxy cement self-levelling mortar: Self-levelling, cement-based 3-component epoxy flow mortar for roughness depth levelling and as osmoprotection intermediate layer on rough substrates exposed to moisture, e.g. milled substrates. Suitable for subsequent reactive resin coating. The application is intended for commercial and industrial areas subject to medium and higher mechanical loads, especially in refurbishment and with increased moisture. EP 724 E Haftgrund Super must be used as primer on EC 610 C for subsequent reactive resin coating. Please refer to the product information. Certified according to EMICODE® EC1 PLUS as particularly low-emission.

Consumption	approx. 6.0 - 8.0 kg/m² at 3 - 4 mm of layer thickness approx. 2.0 kg/m² per mm of layer thickness
Mixing ratio	A : B : C = 0.8 : 4.5 : 22.7 kg per 28 kg packaging unit l parts by weight
Curing time	at 20 °C / 86 °F : 12 - 16 hours
Density (A + B+ C)	Fresh mortar approx. 2.05 kg/l
Packaging unit (net)	Combo packaging 28.00 kg Double unit 56.00 kg

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ec-610-c/

KLB-SYSTEM EC 633 C

Rapid-setting, self-levelling, cement-based levelling mortar: Self-levelling, cement-based levelling mortar for layer thicknesses of 3 - 15 mm, with a reduced shrinkage and rapid hardening. Suitable for levelling and equalising raw and old, worn, mineral substrates in commercial and industrial areas subject to light/ medium loads. Can be applied to concrete, cement screed and other dimensionally stable screeds, and already be coated with reactive resins after short waiting times. Installation is done by adding water. EP 724 E Haftgrund Super must be used as primer on EC 633 C for subsequent reactive resin coating. Please refer to the product information. Certified according to EMICODE® EC1 PLUS as particularly low-emission.

Consumption	approx. 5.4 - 6.0 kg/m² (powder) in a 3 mm layer thickness approx. 1.8 - 2.0 kg/m² dry mortar per mm of layer thickness
Curing time	at 20 °C / 86 °F : 8 - 10 hours
Density	Fresh mortar approx. 2.15 kg/l
Packaging unit (net)	Combo packaging 28.00 kg, Double unit 56.00 kg

www.klb-koetztal.de/en/produkt/klb-system-ec-633-c/

PERFECT SOLUTIONS – WHATEVER THE NEED

4.

Synthetic resin screeds in composite, on separating layer or floating

Installation options for synthetic resin screeds

Synthetic resin screeds are exceptionally durable and ideal where low build-up heights, heavy loads, or challenging structural conditions leave no alternatives. Their high compressive and flexural strength makes them perfect for industrial environments, warehouses, production facilities, and other heavily used commercial spaces. For wet or moisture-exposed areas, we recommend seeking technical advice before installation.

Thanks to their versatility, synthetic resin screeds can be installed as bonded screeds, on a separating layer, or as floating screeds.

Their rapid curing times and minimal layer thicknesses enable fast construction schedules, making them especially suitable for refurbishment and renovation projects. Additionally, their excellent chemical resistance and surface hardness provide a long service life – even under the most demanding conditions.

5.

Epoxy resin screeds

KLB-SYSTEM EPOXID EP 158

Epoxy resin screeds with **KLB-SYSTEM EPOXID EP 158** offer an outstanding solution for high-strength screed constructions across industrial, commercial and residential settings. They are characterised by an excellent mechanical durability, high chemical resistance and low emissions. This makes them a preferred choice for demanding environments such as laboratories, exhibition areas, and production halls. Thanks to its material properties, **KLB-SYSTEM EPOXID EP 158**is particularly well suited for creating thin-layer load distribution screeds.

KLB-SYSTEM EPOXID EP 158is certified as low-emission according to Eurofins "Indoor Air Comfort Gold", complies with AgBB standards, and is perfectly suitable for interior use. Furthermore, it meets the DGNB's criteria for sustainable construction, providing an environmentally responsible option for modern building projects.

Important note:

- The processing of the freshly made mortar mix with **KLB-SYSTEM EPOXID EP 158** with an appropriate quartz sand mixture takes place when fresh.
- The mortar is applied in a uniform layer thickness using levelling gauges, then compacted with a trowel and finally smoothed.
- Alternatively, the mortar can be spread using a screed applicator and finished with a power float. It is recommended to conduct a trial before the installation.

KLB-SYSTEM EPOXID EP 158	
Low-emission 2-component epoxy resin binding agent for decorative coloured sand and industrial mortar coatings: Low-emission 2-component epoxy mortar resin for natural sand or decorative mortar coatings that can be laid manually or by machine. Only slightly yellowing! Compliant with AgBB for recreation rooms. Certified according to Eurofins "Indoor Air Comfort Gold" as particularly low-emission.	
Consumption	Primer: approx. 0.300 - 0.4 kg/m² Mortar coatings: Mixture 1 : 8 resin approx. 1.35 kg/m² for a 6 mm layer thickness Mortar coatings: Mixing ratio 1 : 10 resin approx. 1.10 kg/m² for a 6 mm layer thickness Mortar coatings: Mixture 1 : 12 resin approx. 1.00 kg/m² for a 6 mm layer thickness
Mixing ratio	A : B = 2 : 1 l part by weight
Curing time	at 20 °C / 86 °F : 14 - 18 hours
Density (A + B)	1.08 kg/l
Packaging unit (net)	Combo can 1.00 kg, Bucket combo 10.00 kg, Hobbock combo 30.00 kg, Drum combo 600.00 kg | Drum combo: 2x200 kg Comp. A / 1x200 kg Comp. B

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-158/

DURABLE FLOORS START HERE

Product	Components	Quantity (in kg)	Consumption (in kg/m²) per cm
Formulation KLB EP Screed F 20 DIN EN 13813 SR-C60-F20	EP 158	4.2	1.6
	KLB-Mischsand 1	25	9.8
	KLB-Quarzsand 2-3.5	25	9.8
Formulation KLB EP Screed F 12 DIN EN 13813 SR-C30-F12	EP 158	2.5	1.0
	KLB-Mischsand 1	25	9.6
	KLB-Quarzsand 2-3.5	25	9.6

Mixing ratio Mortar coatings	Resin (kg/m² at a 6 mm layer thickness)
1:8	1.35 kg/m²
1:10 AM	1.10 kg/m²
1:12 AM	1.00 kg/m²

Consumption for producing mortar coatings
Primer: 0.3 - 0.4 kg/m²

Formulation KLB EP Screed

		Screed thickness			
Bending strength class according to DIN EN 13813 EL = Point Load / FL = Distributed Load		EL ≤ 1 kN	EL ≤ 2 kN	EL ≤ 3 kN	EL ≤ 4 kN
		FL ≤ 2 kN/m²	FL ≤ 3 kN/m²	FL ≤ 4 kN/m²	FL ≤ 5 kN/m²
On a separating layer					
KLB synthetic resin screed	F 20	≥ 25 mm	≥ 35 mm	≥ 40 mm	≥ 45 mm
	F 12	≥ 30 mm	≥ 40 mm	≥ 45 mm	≥ 50 mm
With insulation (≤ 2mm compressibility)					
KLB synthetic resin screed	F 20	≥ 25 mm	≥ 30 mm	≥ 35 mm	≥ 40 mm
	F 12	≥ 30 mm	≥ 35 mm	≥ 40 mm	≥ 45 mm
Composite					
KLB synthetic resin screed	F 20	≥ 10 mm	≥ 10 mm	≥ 10 mm	≥ 10 mm
	F 12	≥ 10 mm	≥ 10 mm	≥ 10 mm	≥ 10 mm

FUNDAMENTAL PROTECTION

6.

Plinth sealing

KLB-SYSTEM EC 5610+ and EC 5650

Plinth or base waterproofing plays a crucial role in protecting buildings, garages, and underground car parks from moisture and other harmful influences. This work typically begins during the shell construction phase – parallel to screeding.

Effective plinth sealing prevents the ingress of water, contaminants, and de-icing salts, thereby ensuring the long-term structural integrity of the building, even under demanding environmental conditions. It is particularly essential in basement and foundation construction, as well as in multi-storey car parks, where it protects both the structure itself and adjacent components. When executed properly, plinth sealing helps to prevent moisture-related damage such as efflorescence, spalling, and corrosion – all of which can compromise the appearance and durability of the building fabric.

With KLB surface protection systems **EC 5610+** and **EC 5650**, you benefit from a perfectly coordinated system that offers lasting protection and excellent resistance to loads. **EC 5610+** is a two-component, polymer-modified, crack-bridging coating that provides reliable protection against penetrating moisture. **EC 5650** is an elastic, single-component concrete protection that delivers a high-quality, weather-resistant finish with excellent water vapour permeability. Together, these products form a sustainable and durable solution for even the most demanding construction projects.

KLB-SYSTEM POLYMER EC 5610 +

Crack-bridging 2-component Os5b wall coating: Statically and dynamically crack-bridging, stable 2-component dispersion cement coating, flexible at low temperatures, for wall and plinth areas for protecting against the penetration of harmful substances and de-icing salt on surfaces in underground parking garages, multi-storey car parks or other concrete buildings. Tested within the system K8 KLB PARKING PU OS5b based on the TR maintenance directive.

Consumption	approx. 1.9 - 2.1 kg/m² (wet, after smoothing) per mm layer thickness (dry), after curing, minimum dry layer thickness of 2 mm based on TR maintenance
Mixing ratio	A : B = 1 : 2 l parts by weight
Curing time	at 20 °C / 86 °F : 4 -6 hours
Density	approx. 2.0 kg/l
Packaging unit	Combo packaging (net) 30.00 kg

vw.klb-koetztal.de/en/produkt/parkhaus-oberflaechen-schutzsystem-klb-system-polymer-ec-5610/

KLB-SYSTEM POLYMER EC 5650

1-component dispersion sealer for concrete in multi-storey car parks and underground parking garages: Solvent-free, 1-component concrete protection paint on a dispersion basis for interior and exterior areas. Preferably to be used as diffusion-retarding coating on concrete and as top sealer for EC 5610+ within system K8 KLB PARKING OS5b Wall.

Consumption	0.150 - 0.170 kg/m² (1st layer diluted with 5-10% of water) 0.150 - 0.200 kg/m² (2nd layer undiluted)
Curing time	at 20 °C / 86 °F : 12 -24 hours
Flash point	Non combustible
Density	approx. 1.42 kg/l
Packaging unit	Bucket (net)15.00 kg

www.klb-koetztal.de/en/produkt/parkhaus-oberflaechen-schutzsystem-klb-system-polymer-ec-5650/

ELASTIC AND ACCESSIBLE JOINT SOLUTIONS

7.

KLB Block joints

For industrial and commercial applications

KLB's block joint systems provide durable and efficient solutions for demanding environments – offering a cost-effective alternative to conventional metal joint profiles. With these products, joints can be installed or refurbished quickly and professionally. These elastic, fast-curing joint fillers have excellent resistance to mechanical loads and chemical exposure. This makes them ideal for areas subject to heavy traffic, such as warehouses, exhibition halls, and multi-storey car parks.

With their elastic properties, they are able to permanently absorb the expected movements of the floor slabs caused by shrinkage or mechanical loads. The joint can then be driven over smoothly and quietly. Once installed, there is a level transition between the floor slabs and the concrete elements. Joint installation is usually carried out during running operations and can be completed in a matter of hours.

www.klb-koetztal.de/en/joint-construction-in-a-short-time/

Resistant to mechanical loads:
Designed for heavy-duty use – ideal for material handling equipment and industrial vehicles.

Elastic properties:
Absorbing movements of concrete slabs to prevent cracks and deformation.

Fast installation:
Rapid-setting joint grouting compounds minimise downtime – floors can be used within a few hours.

Low noise and vibration:
Smooth transition between slabs reduce rolling noise and protect both equipment and staff.

Durability:
The joints are permanently load-bearing and resistant, even under heavy mechanical or thermal stress.





COMPLEMENTARY PRODUCTS FOR INSTALLING SCREEDS

8.

Permeable top sealers and impregnations for screed

Efficient screed protection – reliable and low-emission

With **EP 722 E** and **EP 742 E,** KLB offers two highly effective solutions for the treatment and protection of mineral substrates. **EP 722 E** is a deep-penetrating impregnation that binds surface dust and reduces absorbency. **EP 742 E**, in contrast, forms a sealed, protective film on the surface.

Both the impregnation and the sealer have low-emission properties and are perfectly suited for use in technical rooms, or warehouses. **EP 742 E** is certified according to the EMICODE EC1 PLUS – the highest classification for low-emission construction products.

If you prefer a hard-wearing surface treatment with a natural look, **EP 722 E** is the right choice. For a more refined visual appearance with additional protective functions, **EP 742 E** is ideal.

Features	KLB-SYSTEM EPOXID EP 722 E (impregnation)	KLB-SYSTEM EPOXID EP 742 E (top sealer)
Product type	2-component epoxy resin emulsion, colourless	2-component epoxy resin emulsion sealer, coloured
Area of application	Impregnation for concrete, cement, magnesia and anhydrite screeds or as an early impregnation	Top sealer for concrete, screeds, reactive resin surfaces, interior areas
Appearance	Colourless, barely visible	Silk-matt, coloured, visually enhancing
Protective function	Reduces absorbency, ensures a dust-free and easy-care surface	Provides mechanical and chemical resistance, protects against abrasion and soiling
Water vapour-permeable	yes	yes
Chemical resistance	Resistant to oil, grease, salts, and to a limited extent to fuels	Resistant to saline solutions, diluted acids and bases, motor and heating oil
Method of application	Diluted with water and worked into the substrate	Applied with a velours roller in two layers
Curing time (accessibility)	18-24 hrs. at 20 °C / 86 °F	18-24 hrs. at 20 °C / 86 °F
Hardening time (until mechanical load-bearing capacity)	2-3 days	2-3 days

ww.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-722-e/

www.klb-koetztal.de/en/produkt/klb-system-epoxid-ep-742-e/

Did you know the difference?

Impregnation – Protection with deep penetration into the surface
An impregnation provides protection by penetrating deep into the top layer of the screed and protecting it from within, without forming a sealed film on the surface. This reduces water and dirt absorption while preserving the screed's natural look and feel. The original texture and tactile quality of the surface remain unchanged. Impregnations are ideal for areas where the natural appearance of the screed should be retained, offering a subtle, matt finish.

Sealing – Surface protection with a closed layer
In contrast, a sealer creates a dense, often glossy or silk-matt protective film on the surface of the screed. This layer provides increased resistance to abrasion, chemicals and dirt, and makes the surface easier to clean. Sealed screeds often appear more refined and uniform due to the light sheen, making them particularly suitable for visually demanding areas.

Nice to know

The strength of natural stone plays a vital role when selecting aggregates for screeds and floor coverings. It significantly affects key performance attributes such as abrasion resistance, surface hardness, and overall durability. The adjacent table provides a clear comparison of the Mohs hardness and compressive strength of the most commonly used materials.

Good to know: Mohs hardness indicates a material's ability to resist scratching from another. Compressive strength refers to the amount of pressure a material can withstand before it fails.

Material	Mohs hardness (1-10)	Special properties and applications
Limestone	3	Variable natural stone with low abrasion resistance. Used as binding agent
Quatrz (SiO_2)	7	High hardness and good abrasion resistance, often used in screeds and coatings
Durop (hard granulate)	7-8	Very abrasion-resistant, often used in industrial floors as a hard aggregate
Corundum (Al_2O_2)	9	Extremely abrasion resistant, used for high-performance floors
Silicium carbide (SiC)	9.5	Exceptionally hard yet brittle. Used in specialised coatings for enhanced hardness and slip-resistance
Diamond	10	The hardest known mineral

9.

Fire-dried sand mixtures

Versatile and stable for every screed application

These sands are characterised by their exceptionally uniform grain size distribution and complete absence of residual moisture. They offer excellent stability and high grain strength, making them particularly resistant to mechanical stress.

Application in screed construction:

- **Mixed sand for screed mortars:** In the production of screed mortars, fire-dried sand enhances both the strength and consistency of the final product. Its uniform grain size ensures very good workability, resulting in a smooth surface and high load-bearing capacity.
- **Filling sand in scratch coats:** Fire-dried sand is used to smooth and stabilise screed surfaces. Its consistent grain size allows for a homogeneous layer that provides optimal adhesion for subsequent floor coverings.
- **Scattering of epoxy resins:** When used in epoxy resin systems, fire-dried sand serves as a filler to adjust the resin's viscosity. This creates an ideal mix that improves both the workability and durability of the coating.

Surface hardness at the highest level – Silicium carbide makes the difference!

Silicium carbide (SiC) is a highly abrasive material used in the screed industry to increase surface hardness. Combining it with fire-dried sand creates a surface that is highly resistant to mechanical stress and abrasion. This is especially beneficial in high-traffic areas such as workshops and industrial facilities. The result is a significantly extended service life for the screed.

Mixed sand KLB-Mischsand 1

Quartz sand mixture of up to 2.5 mm grain: Special quartz sand mixture for producing synthetic resin coverings or screeds, industrial coatings as well as repair and levelling layers for subsequent synthetic resin coatings. Particularly suitable in combination with epoxy resins EP 150 and EP 158.

Packaging unit (net)	Bag 25 kg Euro pallet 1,000 kg

www.klb-koetztal.de/en/produkt/klb-mischsand-1/

Mixed sand KLB-Mischsand 2/1

Filler sand for scratch coats and coatings: Standard filling sand mixture for scratch coats.

Packaging unit (net)	Bag 25 kg Euro pallet 1,000 kg

www.klb-koetztal.de/en/produkt/klb-mischsand-2-1/

Mixed sand KLB-Mischsand 3/1

Filler sand for scratch coats and base layers: Special filling sand mixture within up to 1.0 mm for producing levelling layers.

Packaging unit (net)	Bag 25 kg Euro pallet 1,000 kg

www.klb-koetztal.de/en/produkt/klb-mischsand-3-1/

KLB quartz sand

Fire-dried filling and scattering sands: Fire-dried, graded quartz sand in different grain sizes to be used as scattering or filling sand for reactive resins or coatings.

Available grain sizes	0.06/0.2 mm; 0.1/0.3 mm; 0.1/0.5 mm 0.3/0.8 mm; 0.7/1.2 mm, 2.5/3.0 mm
Packaging unit (net)	Bag 25 kg Euro pallet 1,000 kg

www.klb-koetztal.de/en/produkt/klb-system-klb-quarzsand-0-3-0-8-mm/

KLB quartz sand, dust-free

Scattering sand for PU and EP coatings, low-dusting: Low-dust quartz sand to be used preferably for scattered epoxy or polyurethane resin coverings. Not suitable for PMMA resins!

Available grain sizes	0.3/0.8 mm; 0.7/1.2 mm
Packaging unit (net)	Bag 25 kg Euro pallet 1,000 kg

www.klb-koetztal.de/en/produkt/klb-quarzsand-0-3-0-8-mm-low-dust/

KLB-Korund white

Special granulate for scattering slip-resistant coatings: White, hard, angular scattering compound for producing slip-resistant coverings. With a high degree of slip-resistance (R12/R13) and a very good wearing behaviour.

Packaging unit (net)	Bag 25 kg

www.klb-koetztal.de/en/produkt/klb-korund-white-0-5-1-0-mm/

KLB-Silicumcarbid, anthracite

KLB-Silicumcarbid, anthracite Hard, wear-resistant special granulate for scattering slip-resistant or conductive floors.

Available grain sizes	Please ask for availability.
Packaging unit (net)	Bag 25 kg

www.klb-koetztal.de/en/produkt/klb-siliciumcarbid-0-3-0-8-mm/




10.

Adhesive for tensile strength testing

Consistent results require consistent adhesion

Conducting surface or adhesive tensile strength tests in accordance with the **BEB information sheet "surface and adhesive tensile strength of floors"** is essential for evaluating the load-bearing capacity and homogeneity of concrete substrates, screeds and coatings.

For maximum safety and a reliable bond between the test stamp and the surface during testing, the specially developed, paste-like adhesive **KLB-BOND AC 384 PMMA** ensures precise results and comes recommended by the ***German Association for Screed and Floor Coverings (Bundesverband Estrich und Belag e.V., "BEB")*** This PMMA-based adhesive is ideal for rapid testing thanks to its very short curing time.

Surface tensile strength refers to the tensile resistance of the surface layer of screed or concrete. It is an indicator of how well the uppermost layer of a substrate resists mechanical forces. This testing method provides experts with critical information – such as whether a substrate can meet the requirements of subsequent layers.

Adhesive tensile strength, on the other hand, assesses the bond strength between at least two layers of a floor system, e.g. between concrete and a coating. This method is particularly relevant when reactive resin coatings are applied to screed or concrete surfaces. Analysing the resulting fracture patterns further enhances the evaluation by revealing potential weak points or irregularities.

Extremely fast-curing:
Fixation possible after just 15-25 minutes at 20 °C / 86 °F

Excellent adhesion:
Ideal for force-fit connections, e.g. surface tensile strength

Flexible use:
For small-surface repairs prior to coating works

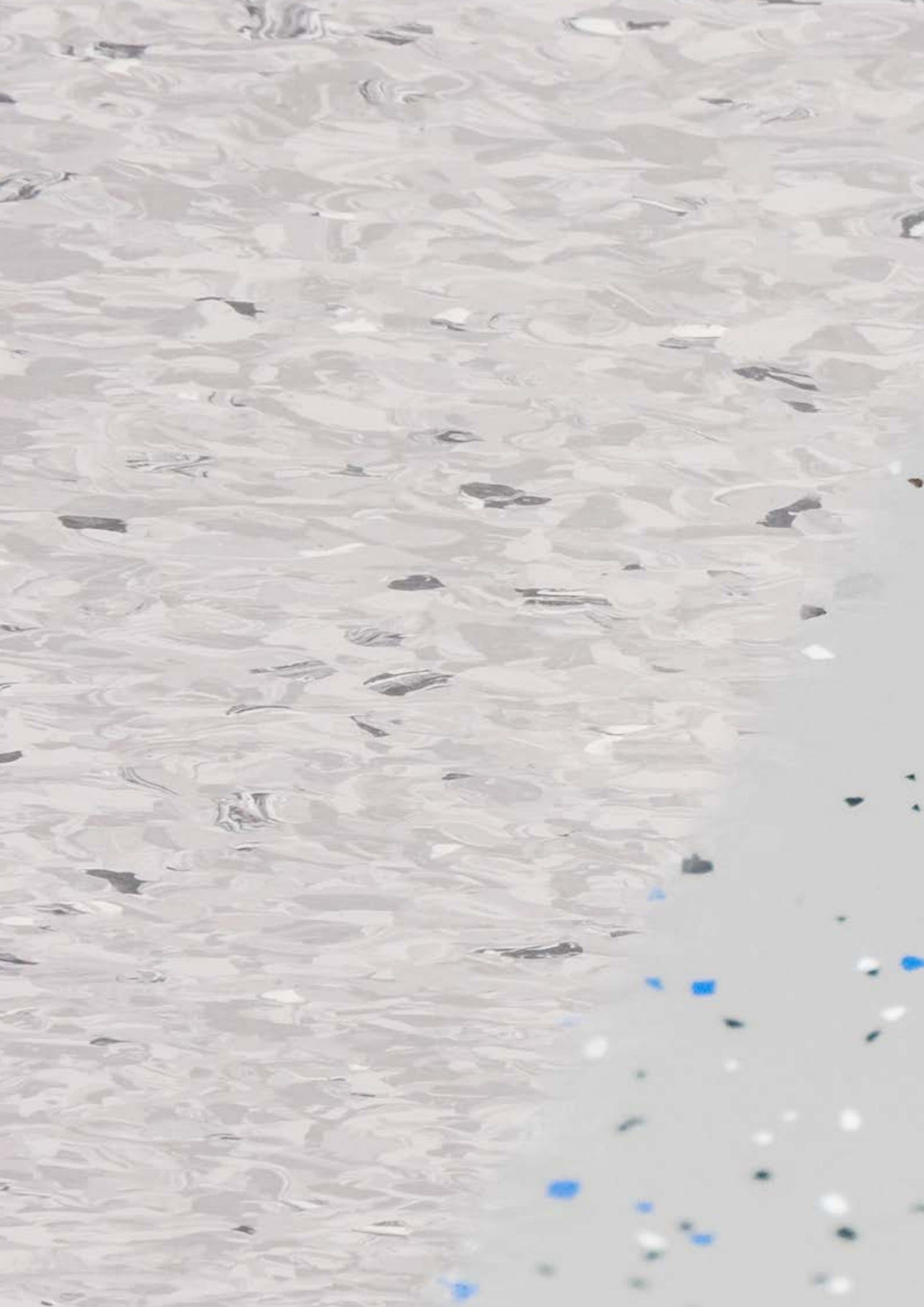
Easy processing:
Structurally viscous consistency for a clean application

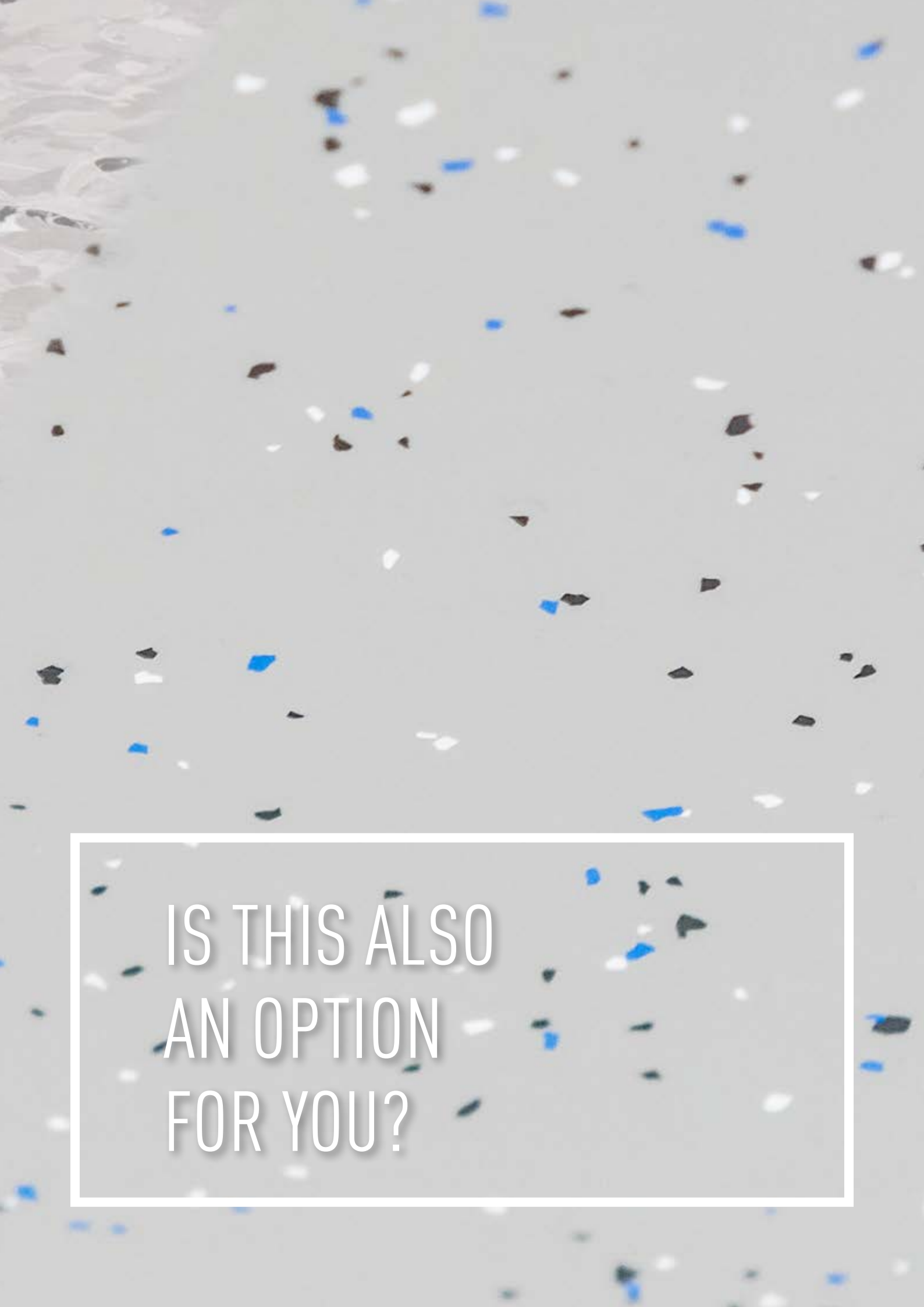
https://www.klb-koetztal.de/en/produkt/klb-bond-ac-384-pmma/

We are a supporting member of the BEB

We are a supporting member of the BEB: the German Association for Screed and Floor Coverings (Bundesverband Estrich und Belag e.V.) represents quality and expertise in flooring construction. Through its specialist publications, the BEB provides valuable guidance to planners, architects, building owners and professionals in the building industry. By bringing together specialised companies and industry experts, the BEB fosters collaboration to develop first-class flooring solutions.

FÖRDERMITGLIED IM
BUNDESVERBAND
ESTRICH & BELAG




IS THIS ALSO
AN OPTION
FOR YOU?

11.

Renovations with KLB FLOOR SEALER

Refurbishment of resilient floorings using KLB FLOOR SEALER products – an economical and sustainable alternative for renovation without long downtime

The KLB **FLOOR SEALER** range represents an innovative solution for renovating old but technically intact and therefore still usable resilient subfloors, e.g. PVC, vinyl, linoleum, rubber or rubber stud coverings, especially in commercial and public areas. **FLOOR SEALER** products can come into play whenever the installation of a new floor is not possible for reasons of time or cost and yet a visually appealing "fresh" coating is required. The service life of elastic top floors can be significantly extended in this way.

The prerequisite, however, is good adhesion and a level surface. As an alternative to laying a new floor, the existing covering can be redesigned and upgraded with current design ideas and colour concepts in a relatively short time using our **FLOOR SEALER** products without reworking. It is also possible to convert non-conductive floorings into conductive ones.

All **FLOOR SEALER** products are certified as extremely low-emission according to EMICODE EC1 PLUS and can therefore be used in indoor areas without any problems.

Old top floor prior to the renovation with FLOOR SEALER.

New visually appealing flooring after renovation with FLOOR SEALER.

FLOOR SEALER 200 Color

Coloured 2-component polyurethane sealer for renovating top floors: Coloured, low-emission, light-stable 2-component polyurethane sealer for renovating top floors. The sealer can be used for refurbishing, renovating or refreshing surface coverings (e.g. PVC, linoleum, as well as rubber and rubber stud coverings), as a silk-matt sealer, as base coat for scattering with partiColor® coloured flakes or as a plain-coloured and opaque sealer to be applied twice. Has a very good adhesion, good usage properties and low tendency to staining. Certified according to EMICODE EC1 PLUS and suitable for indoor recreation rooms.

Consumption	approx. 0.120 - 0.160 kg/m²
Mixing ratio	A : B = 100 : 25 l parts by weight
Curing time	at 20 °C / 86 °F : 12 -16 hours
Density (A + B)	1.10 kg/l
Packaging unit (net)	Combo packaging 5.00 kg, Combo packaging 10.00 kg

www.klb-koetztal.de/en/produkt/floor-sealer-200-color/

FLOOR SEALER 100 Tranparent

Non-pigmented 2-component polyurethane sealer for renovating top floors: Non-pigmented, low-emission, light-stable 2-component polyurethane sealer for renovating top floors. The product can be used for refurbishing, renovating or refreshing surface coverings (e.g. PVC, linoleum, as well as rubber and rubber stud coverings) as a matt top sealer. Has a very good adhesion, long durability, good usage properties and low tendency to staining. Certified according to EMICODE EC1 PLUS and suitable for indoor recreation rooms.

Consumption	approx. 0.120 - 0.160 kg/m²
Mixing ratio	A : B = 100 : 25.0 l parts by weight
Curing time	at 20 °C / 86 °F : 12 -16 hours
Density (A + B)	1.08 kg/l
Packaging unit (net)	Combo packaging 5.00 kg, Combo packaging 10.00 kg

www.klb-koetztal.de/en/produkt/floor-sealer-100-transparent/

FLOOR SEALER 300 Antistatic

Electrically conductive, coloured 2-component polyurethane sealer for renovating top floors: Coloured, electrically conductive, low-emission 2-component polyurethane sealer for renovating top floors. The sealer can be used for refurbishing, renovating or refreshing conductive surface coverings (e.g. PVC, linoleum, as well as rubber and rubber stud coverings) or also as a conductive sealer for non-conductive surfaces in case of subsequent change of use. Fulfils the requirements in terms of personal and ESD protection. Certified according to EMICODE EC1 PLUS and suitable for indoor recreation rooms.

Consumption	approx. 0.150 - 0.200 kg/m²
Mixing ratio	A : B = 100 : 20 l parts by weight
Curing time	at 20 °C / 86 °F : 12 -16 hours
Density (A + B)	1.19 kg/l
Packaging unit (net)	Combo packaging 10.00 kg

www.klb-koetztal.de/en/produkt/floor-sealer-300-antistatic/

FLOOR SEALER PS 350 Grundreiniger

Special base cleanser for the subsequent renovation with KLB Floor Sealer systems: Special base cleanser for preparing and cleaning top floors with subsequent renovation within the KLB Floor Sealer system. As basic detergent for intensively cleaning top floors and coatings. Suitable for linoleum, PVC as well as rubber and rubber stud floorings and coverings on the basis of epoxy or polyurethane resin.

Consumption	approx. 40 - 150 g/m² per application and cleaning cycle
Density (A + B)	1.80 kg/l
Packaging unit (net)	10.00 l Canister

www.klb-koetztal.de/en/produkt/floor-cleaner-ps-350/

12.

Cleaner for EP resins

Clean tools for flawless results

Proper cleaning of tools and equipment after working with epoxy resins is essential for maintaining their longevity and ensuring consistent, high-quality results. Special cleaners are available to effectively remove both fresh and cured resins.

The overview below highlights the application areas for two different cleaning agents.

VR 24 is ideal for **cleaning tools after working with epoxy resins**, provided that the resin has not yet hardened. It can also be used as a **thinner for epoxy resins**. However, it is **not suitable for polyurethane resins**.

VR 36 is a more environmentally friendly and low-odour alternative. It is especially effective for **cleaning tools**, even after the resin has hardened. It can be used with both epoxy and polyurethane resins, but **not as a thinner.**

KLB-SYSTEM VERDÜNNER UND REINIGER VR 24	
Thinner and cleaner for epoxy resins: Thinner and cleanser for epoxy resins. Mild thinner and cleaner, preferably for epoxy resins. Highly flammable. Not suitable for polyurethane resins.	
Flash point	approx. + 13 °C
Density	0.8 kg/l
Packaging unit (net)	10.00 l Canister

www.klb-koetztal.de/en/produkt/klb-system-verduenner-und-reiniger-vr-24/

KLB-SYSTEM VERDÜNNER UND REINIGER VR 36	
Special cleaner for epoxy and polyurethane resins: Environmentally-friendly solvent mixture for cleaning tools after reactive resin works with very low volatility.	
Flash point	approx. + 100 °C
Density	1.09 kg/l
Packaging unit (net)	10.00 l Plastic canister

www.klb-koetztal.de/en/produkt/klb-system-reiniger-vr-36/

13.

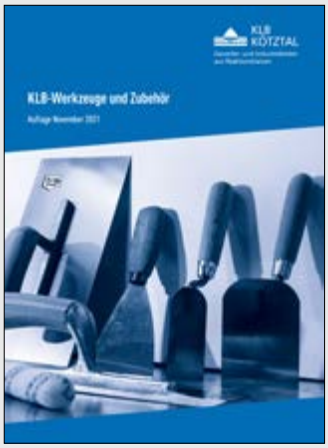
Tools and equipment

The right tools and accessories for the perfect floor – efficiency and precision every step of the way

Selecting the right tool is essential for efficient and precise screed work. Whether you're mixing mortars, applying resins or finishing surfaces, the appropriate equipment can significantly enhance work quality while reducing effort and time.

Our tool catalogue offers a comprehensive range of tools specially designed for working with screed materials and resins.

We also provide the necessary personal protective equipment (PPE) to ensure safe working conditions. From high-quaity protective gloves and nail shoes to safety goggles, i ensures that you are fully prepared for the demands of screed construction.



Further information:

For in-depth information and a more detailed overview of our tool assortment, please refer to the following brochure:

→ **KLB Equipment and tools catalogue**

Which you can find on our website:
www.klb-koetztal.de/equipment-and-tools

Be one step ahead...

With our high-quality KLB reactive resins, we provide well thought-out solutions – perfectly tailored to your requirements. Whether you're looking for durable coatings or customised system solutions, we stand by your side as a reliable partner with extensive experience and technical expertise.

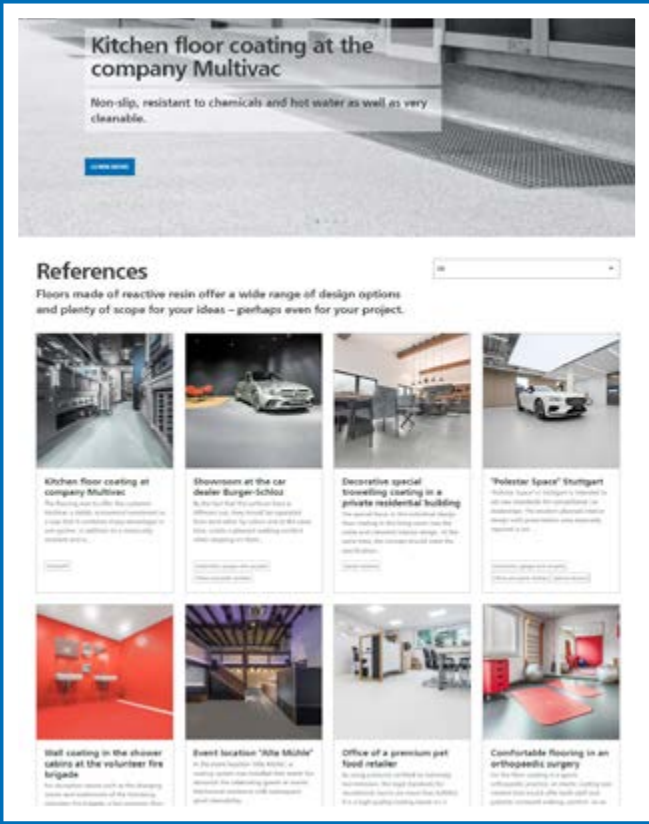
Get in touch with us and place your trust in KLB products. Rely on proven coating solutions for long-lasting and high-performance construction.

Here you can find further information:
www.klb-koetztal.com

The systematic approach to great flooring.

You can find more systems, references and brochures on our website:

www.klb-koetztal.de/en/systemfinder



www.klb-koetztal.de/en/klb-references

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