KLB KÖTZTAL
Lacke + Beschichtungen GmbH

KLB-SYSTEM ACRYL
AC 390

Rapid setting, elastic 2-component acrylic resin for flexible interlayers and scattered coatings

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
MA0004-52	Canister	10.00	50
MA0004-01	Drum	200.00	2
MA0004-92	Hobbock	25.00	12

Product characteristics

Processing time	-5 °C / 23 °F: 25 min. 0 °C / 32 °F: 20 min. 5 °C / 41 °F: 18 min. 12 °C / 53.6°F: 15 min. 20 °C / 68 °F: 13 min. 30 °C / 86 °F: 10 min.
Curing time (accessibility)	-5 °C / 23 °F: Approx. 2.0 - 2.5 hrs. 0 °C / 32 °F: Approx. 1 hrs. 5 °C / 41 °F: Approx. 55 min. 12 °C / 53.6°F: Approx. 45 min. 20 °C / 68 °F: Approx 30 min. 30 °C / 86 °F: Approx. 25 min.
Dosage of hardener	-5 °C / 23 °F: 6.0 % 0 °C / 32 °F: 6.0 % 5 °C / 41 °F: 5.5. - 6.0 % 12 °C / 53.6°F: 3.5 - 4.0 20 °C / 68 °F: 2.5 - 3.0 % 30 °C / 86 °F: 2.0 - 2.5
Curing	Approx. 2 hours for load
Further coatings	After curing and accessibility
Consumption	Approx. 2.5 kg/m² for 5 mm layers; 0.5 kg/mm for each mm of layer
Colours	non-pigmented, the colouring takes place with KLB-Pigments
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM ACRYL AC 390 is a 2-component acrylic resin for producing elastic interlayers as well as thick-layered scattered coatings (starting at 5 mm). Suitable substrates are concrete and cement screed, as well as metal substrate (orthotropic steel plates).

Coatings with **KLB-SYSTEM ACRYL AC 390** are elastic and abrasion-resistant, even at lower temperatures.

Thick-layered coatings with **KLB-SYSTEM ACRYL AC 390** must be fully scattered and sealed in order to increase the compressive strength and to improve the anti-slip grade (e.g. with **KLB-SYSTEM ACRYL AC 320**).

KLB-SYSTEM ACRYL AC 390 coatings are suitable for interior and exterior areas.

KLB-SYSTEM ACRYL AC 390 is resistant to water, saline solutions, oil, diluted acids and bases.

Area of application

Thick-layered scattered coatings in areas of storage rooms, workshop rooms, cool storage rooms, loading ramps, traffic areas, underground parking lots and parking decks, pedestrian bridges and piers, and many more.

Product features

- very rapid-setting
- rapid accessibility
- thick layers starting at 5 mm
- extremely resistant to mechanical loading
- highly elastic
- flexible at low temperatures
- resistant to impacts
- crack-bridging
- for interior and exterior areas
- free of deleterious substances against varnish

Technical data

Viscosity	1300 - 1500	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Density	1.0	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)

The values established in tests are average values. Deviations from the product specification may occur.

Included in systems

- System H3 KLB KITCHEN PMMA Standard

Please visit our website to get more information about our KLB systems: www.klb-koetztal.com

Tests

- Product is compliant with DIN EN 13813: 2003-01.

Build-up of coats

- Prepare the substrate mechanically by shot blasting to remove any loose or weakly bonded parts. Vacuum with a powerful industrial vacuum cleaner.
- Priming with **AC 20**, consumption approx. 0.350 - 0.450 kg/m², depending on the substrate. It is recommended a slight scattering with quartz sand, grain size 0.7 / 1.2 mm.
- If necessary: apply a scratch coat for an even substrate, with e.g. **AC 390** and mixed sand **KLB-Mischsand 2/1** mixing ratio 1 : 2 parts by weight, consumption binding agent approx. 0.5 kg/m².

Flexible interlayer

- Apply **AC 390** and mixed sand **KLB-Mischsand 2/1,** mixing ratio 2 : 1 parts by weight in a thickness of approx. 1 mm, consumption of binding agent approx. 0.9 kg/m². If necessary, the layer can be pulled up to a few centimeter at connections to walls, pillars etc. with the addition of thixotropic agent **KLB-Stellmittel 3 Super**. The membrane layer should not be scattered, in order to maintain its flexibility.
- This is followed by the main coating with the filled **AC 313**, **AC 320** or **AC 390** in the desired layer thickness (see corresponding product information).

5 mm coating

- Apply the primer **AC 390** and mixed sand **KLB Mischsand 2/1**, mixing ratio 1 : 2.5 parts by weight in a thickness of approx. 5 mm, consumption of binding agent approx. 2.5 kg/m².

Note: with the use of colour quartz sand for scatterings, it is recommended to colour the base layer with KLB pigments in a similar colour, approx. 5 %-weight, based on the binding agent content.

- Scatter the whole surface in excess with colour or natural quartz sands, preferably in the grain size 0.7/1.2 mm, consumption approx. 4 - 5 kg/m².
- After curing, sweep and vacuum off any excess until no more sand is released.
- Apply **AC 320** as elasticized top-sealer, transparent with colour sand, pigmented with natural sand (10 %-weight colour pigment, based on the binding agent content), with a rubber squeegee; then roll again with a velour roller in crosswise motion. Consumption approx. 0.5 kg/m².
- If necessary and for a better dirt repellency, it is possible to apply a second sealing layer with **AC 820** or **AC 826**.

Note: thick layer coatings made with **AC 390** must always be saturated with scattered quartz sand to obtain a sufficient compressive strength of the surface.

Substrate

The substrate to be coated must be even, dry, free of dust, sufficiently resistant to tension and compression as well as be free from weakly-bonded components or surfaces. Materials impairing adhesion such as grease, oil and paint residues should be removed with suitable measures. The substrates to be coated should be prepared mechanically, preferably by shot blasting. The surface strength must then be at least 1.5 N/mm². For concrete, moisture content must not exceed 4.5 CM-%, remaining residual humidity. The possibility of moisture ingress from the rear must be permanently excluded. Metal substrates must be blasted. Before applying the coating, prime the prepared substrate with **AC 20** until the surface is closed (approx. 400 g/m² for cementitious substrates, approx. 200 g/m² for metal substrates) and scatter openly with quartz sand.

Mixing

KLB acrylic resins are always supplied in cans or bung drums. It is important to stirr or agitate the resin before processing. Due to the rapid curing of the material, only partial quantities to be processed within the pot life should be mixed. The addition of hardener powder is variable within limits for acrylic resins. At higher temperatures, reduce the amount of hardener to the minimum, at low temperatures increase to the maximum amount of hardener. At room temperature, the average quantity indicated is recommended. In any case, note the indicated hardener quantities, as curing problems may occur if too little and colour changes may arise if too much is added. Empty all of the hardener compound into the core component and mix carefully and mechanically for at least 30 - 60 seconds. If aggregates such as mixed sand or pigments are used to produce flow mortar, they can be stirred in first to the binding agent and the hardener powder added at the end. In the case of stiff-plastic mortar mixtures such as **AC 345 Hohlkehlenharz**, the hardener powder must be added and homogeneously stirred in before adding the additives.

Processing

Process immediately after mixing because of the short pot-life. With these fast-curing systems, it is important that the work areas are carefully divided before starting and that sufficient personnel are available. The application must always be done "fresh in fresh". Pour the material in portions onto the substrate and spread it evenly with a toothed or spiked roller. After a short time, deaerate with the spiked roller in a crosswise motion. Adequate air circulation is necessary during and after processing for good curing. Insufficient air ventilation and static air layer may result in curing disturbances. Avoid draught.

Floor and air temperature must not fall below -5 °C / 23 °F. If a dew-point situation arises, adhesion may be disrupted. If working conditions are not complied with, the technical properties of the end product may deviate from those specified.

Note: the specified hardener quantities are adjusted for a temperature range between -5 and 30 °C / 23 and 86 °F. For application at lower temperatures (up to -30 / -22 °F possible), please obtain manufacturers advice.

Cleaning

To remove fresh contamination and to clean tools, use thinner **VR 119** immediately. Hardened material can only be removed mechanically.

Separate cleaning and care recommendations are available for cleaning floors produced with KLB coatings and sealers.

Storage

Store in dry and at frost-free conditions. Ideal storage temperature is between 10 - 20 °C / 50 - 68 °F. Do not store above 30 °C / 86 °F. Bring to a suitable working temperature before application. Tightly re-seal opened containers and use the content as soon as possible.

Special remarks

The product is regulated by the German Ordinance on Hazardous Substances (GefStoffV), the German Ordinance on Industrial Safety and Health (BetrSichV), and transport regulations for hazardous goods. The necessary information is contained in the DIN Safety Data Sheet. Observe all identification information on the container label!

GISCODE: RMA 10

Indication of VOC-content:
(EG-Regulation 2004/42) Maximum Permissible Value 500 g/l (2010,II,j/lb): Ready-for-use product contains < 500 g/l VOC.

CE marking

CE
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 FRG-89335 Ichenhausen
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AC390-V1-022013
DIN EN 13813:2003-01
Synthetic resin screed mortar DIN EN 13813: SR-B1.5-AR0.5-IR6

Fire behaviour	E_{fl}-s1
Emission of corrosive substances	SR
Wear resistance to BCA	AR 0.5
Adhesive tensile strength	B 1.5
Impact resistance	IR 6

Please consider the latest version of this product information on our website.

All stated information is based on our experience and technical preparation. We guarantee the correct and proper quality of our products. We do not assume any responsibility for the work not carried out by us, since we have no influence on the processing or processing conditions. We recommend on-site trials to be conducted. With appearance of this new KLB product information, all prior information loses validity. The updated version is available on our website www.klb-koetztal.com. In addition, our "General Terms and Conditions“ apply.

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