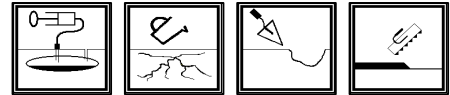


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SYSTOPP[®] ECO Repair 1

Two-component epoxi-resin with wide application area

Description	SYSTOPP [®] ECO Repair 1 is a two component epoxy resin which is pumped under hollow areas, used as a primer, used to gum cracks, and for the production of mortars and scratch coatings on concrete or cement screed with low residual moisture in indoor areas.		
Application area	indoor industrial, commercial and public buildings industrial facilities and warehouses, car parks etc.		
Characteristics	solvent free:	low odor	
	low viscosity:	excellent filling properties	
	nonyl phenol free:	easy to apply	
	plasticizer-free:	structurally stable	
	slow to react:	long pot life	
Product data	Density:	at 20° C	approx. 1,15 kg/l
	Viscosity:	at 20° C	approx. 750 mPas
	Processing time:	at 20° C	approx. 30 minutes
	Mixind ratio:	2 plus 1	resin plus hardener according to weight
	Volume solid material:		approx. 100%
Colour tone	Light yellow and transparent after hardened.		
Material data	hardness:	following DIN 53505	ca. 85 Shore D
	workable:	at 20° C	after 12 hours
	loadable:	at 20° C	after 2 days
	hardened:	at 20° C	after 7 days
	ready for finish:	at 20° C	within 24 hours
Base	The base must be dry, hard, and stable. Dust, grease, oil, or other bond weakening contamination must be removed by taking appropriate action such as cleaning, sandblasting, or grinding. The adhesive strength of the surface must not fall below 1.5 N/mm ² . The possibility of ascending humidity must be eliminated.		
Climate data	Dew displacement:	minimum 3 K above	
	Substrate temperature:	minimum 8° C	
	Substrate moisture:	maximum 3%	
	Relative humidity:	maximum 65 %	
	Ambient temperature:	minimum 10° C	maximum 30° C
	Material temperature:	minimum 10° C	maximum 25° C

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SYSTOPP[®] ECO Repair 1

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Mixing

SYSTOPP[®] ECO Repair 1 is delivered in systematized containers. Right before application the hardener is added to the base component and thoroughly mixed with a slow moving agitator for at least 3 minutes. Thereafter the mixture is poured into a clean bucket and stirred again briefly.

Processing

For application as injection resin:

SYSTOPP[®] ECO Repair 1 EP is pumped after mixing into the hollow space that requires filling with a hand-lever grease gun, a low or high pressure pump via the injection packer until it emerges from the open bore holes. The compound is re-pumped into the hollow space again after 5 minutes.

For application as embedding resin:

SYSTOPP[®] ECO Repair 1 is pored into the cracks that require filling after mixing with a tub or a can. Thereafter the compound is smoothed with a trowel and grinded after hardening if necessary

For application as mortar resin:

SYSTOPP[®] ECO Repair 1 is shoveled into the holes that require filling and then sealed after mixing and adding sand. The mortar surface is leveled off with a leveling board and then smoothed out with a trowel or a power trowel and condensed.

For scratch coating:

SYSTOPP[®] ECO Repair 1 apply after mixing and adding quartz sand or quartz powder at the desired thickness on to the substrate with a trowel (with or without toothed edge).

Usage

For application as injection resin:

Approx. 1,15 kg/l volume that requires filling.

For application as embedding resin:

Approx. 1,15 kg/l volume that requires pouring.

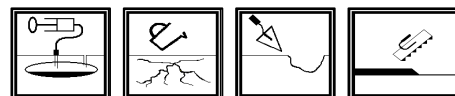
For application as mortar resin:

- Example 1: ca. 0,20 - 0,25 kg/m²/mm for mortar with mixing ratio of 1 part SYSTOPP[®] ECO Repair 1 plus 8 parts quartz sand.
- Example 2: ca. 0,10 - 0,15 kg/m²/mm for mortar with mixing ratio of 1 part SYSTOPP[®] ECO Repair 1 plus 15 parts quartz sand.
- Example 3: ca. 0,08 - 0,13 kg/m²/mm for mortar with mixing ratio of 1 part SYSTOPP[®] ECO Repair 1 plus 20 parts quartz sand.

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SYSTOPP[®] ECO Repair 1

Two-component epoxy-resin with wide application area

Usage

For scratch coating:

Example: ca. 0,60 kg/m²/mm for mixing of 1 part ECO Repair 1 plus 2 parts quartz sand.

Use quartz sand 0,1 - 0,5 mm.

Use SYSTOPP[®] Floorprimer EP with ca. 0,5 kg/m² as primer.

Dosage rate can vary with quality of substrate.

Tips & Tricks

Never place the containers upside down on the surface being sealed to empty the mixture. It is better to pour the mixture into the next bucket being used and mix in. Poorly mixed material on the edge of the container may impair the hardening process of the surface. This applies especially when the recommendation to "refill the mixture" is not followed. Store the binding agents and additives on the construction site at room temperature. This will reduce the likelihood that condensation water will form.

Form of delivery

20 kg: 13.33 kg resin and 6.67 kg hardener in buckets and canisters

10 kg: 6.67 kg resin and 3,34 kg hardener in buckets and canisters

1 kg: 0.67 kg resin and 0.33 kg hardener in buckets and canisters

Storage

SYSTOPP[®] ECO Repair 1 can be stored for a minimum of half a year at a storage temperature of 10° C to 30° C in tightly sealed original containers

Equipment cleaning

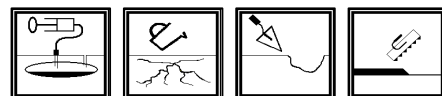
Special thinner for reaction resins.

Notes

When applying the primer, make sure that the material is spread evenly and that the surface is completely covered. Re-prime the surface if there is high absorbency. This reduces the probability of weak bonding and increased formation of air pockets when applying subsequent layers. Always sand down primed surfaces if there is risk of freezing or if the surface is located outdoors. Otherwise bonding difficulties may occur. High levels of relative humidity and carbon dioxide percentages (e.g. when using heating burners) can lead to the formation of amine carbamates on the surface of the resin and bonding difficulties, optical degradation and low resistance to dirt. Only use fire-dried quality blends of quartz sand otherwise bonding difficulties may occur. Extended periods of storage at temperatures < 10° C may lead to the crystallization of the resin. The product then becomes murky and a milky crystalline type sediment normally forms and the product may no longer be processed. Always gum the flanks first when working with mortar and then apply "wet in wet." This reduces the probability of the material separating

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SYSTOPP[®] ECO Repair 1

Two-component epoxi-resin with wide application area

General information

All relative standards, regulations, and rules of craftsmanship will apply during application, in particular DIN EN 13813, DIN 18560 and DIN 18353. The regulations and instructions contained in the BEB work sheets "Industrial floors made of reaction resin," the accident prevention regulations and the data sheets and guidelines of the Chemical Employer's Liability Insurance Association. E. g. BG-data sheets M 004 "Irritant substances / corrosive substances" and M 023 "Polyester resin and epoxy resin." Please comply with the instructions in the safety data sheet.

Disposal

Only return the containers for collection and recycling after they are completely empty. The product can be disposed of as household waste once it has hardened.

Legal disclaimer

All of the technical data and information contained in this data sheet is based on laboratory tests. Practical experience may vary based on the conditions of the respective construction site over which we have no influence. All information, instructions, and recommendations for the application and use of our products are based on our experience and knowledge of standard conditions. We also presume professional and proper handling / storage of the materials. Work results cannot be guaranteed and no liability can be assumed for oral or written information or advice due to the different types of materials, substrates, and working conditions at the respective construction sites. Liability is restricted only to cases of willful misconduct or gross negligence. The user must provide proof that all individual case knowledge has been completely documented in writing and mailed to the Knopp GmbH to allow for a proper assessment of each situation. The performance test of our products for their designated use is the responsibility of the user. We reserve the right to change the product specifications. The technical data sheet that is currently valid can be requested from us.