Product Data Sheet
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Construction

Sikadur®-41

Epoxy Resin Patching Mortar

Product Description	**Sikadur®-41** is a solvent-free, three-component, thixotropic patching mortar based on a combination of epoxy resins and selected quartz aggregates. Suitable for use in tropical and hot climatic conditions.
Uses	Sikadur®-41 contains a medium degree of aggregate filling and therefore can be used in a number of varying applications such as: ■ Repair and bonding mortar for stone, concrete, mortar, rendering, steel, iron, wood etc. ■ For vertical and overhead filling of cavities ■ Repair mortar for damaged concrete joint edges and concrete roads ■ Abrasion resistant and impact resistant wearing course ■ For structural bonding of wide joints
Advantages	**Sikadur®-41** is available in three different grades of reactivity: normal, rapid and long pot life. Other benefits are: ■ Rapid hardening according to grade used ■ Suitable for both dry and damp substrates ■ Shrinkage-free hardening ■ Curing is not affected by high humidity ■ Good adhesion to concrete ■ High mechanical strengths ■ Abrasion and impact resistant ■ Different colour components (mixing control)

Product Data

Type	Epoxy resin, curing agent and selected quartz aggregates
Form	Grey (Comp. A: white, Comp. B: black, Comp. C: sand)
Packaging	10 kg units (A+B+C) 10 kg pails (A/B) 30 kg pails (A/B) 25 kg bags (C)
Storage Condition	Store in a dry area between 5ºC and 35ºC. Protect from direct sunlight
Shelf life	12 months minimum from production date if stored properly in original unopened packaging.

Technical Data

Mixing ratio

Normal/Rapid Type: Comp. A:B:C = 3:1:4 parts by weight
3:1:5 parts by volume
LP Type: Comp. A:B:C = 2:1:3 parts by weight
2:1:4 parts by volume

Mechanical strengths

	Normal / Rapid Type (after 10 days at +10 - 20°C)	LP Type (after 10 days at +20 - 30°C)
Compressive strength	75 - 85 N/mm²	75 - 85 N/mm²
Normal type: after 24 hrs. at +20°C	55 - 60 N/mm²	
Rapid type: after 24 hrs. at +5°C	45 - 50 N/mm²	
L.P. type: after 24 hrs. at +30°C		50 - 55 N/mm²
Flexural strength	25 - 35 N/mm²	20 - 30 N/mm²
Tensile strength	10 - 15 N/mm²	10 - 15 N/mm²
Bond strength to concrete (DIN 53232)	(concrete failure)	(concrete failure)
Bond strength to steel	10 - 15 N/mm²	10 - 15 N/mm²

Pot Life

Test-Temperature	4kg Normal	4 kg Rapid	10kg L.P
40° C	--	--	~40 min
30° C	~20 min	~10 min	~ 1 hrs
20° C	~ 1 hrs	~30 min	~ 2 hrs
10° C	~ 2 hrs	~ 1 hrs	--
5° C	~ 3 hrs	~ 1½ hrs	--

Density

Approximately 2.0 kg/ltr

Coefficient of thermal expansion

26 x 10^{-6} per °C (temp. range: -10°C to +40°C)

Modulus of elasticity

9 000 N/mm² (static)

Coverage

Approximately 2 kg/m² per 1 mm thickness

Application Details

Substrate preparation

All surfaces must be clean, sound, free from dust, grease, oils, standing water and all loosely adhering particles. Cement laitance must be removed and the surfaces to be treated must be mechanically roughened. Concrete must be at least 3 weeks old, depending on climate. Metal surfaces (steel and iron) should be free from scale, rust, oil and grease.

Priming

Prime porous substrates with component A + B of **Sikadur®-41** or Sikafloor 156 Primer. On damp substrates apply Sikadur-31 as a primer. Work well into the substrate.

Mixing

Mix components A+B together for at least 2 minutes with a low speed electric drill (maximum 500 rpm), until a smooth, homogeneous consistency and uniform colour are achieved. Slowly add component C and continue mixing until the mixture is homogeneous. Avoid entrapping air.

Application

After mixing, apply directly to the prepared substrate by spatula or trowel depending on the application. Tamp down firmly to ensure thorough compaction.

Cleaning

Clean tools with Colma Cleaner before hardening of the adhesive. Hardened adhesive can only be removed mechanically.

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Remarks	Optimal working temperatures for each grade are; Normal Type: 10 °C - 30°C, Rapid Type: 5 °C - 15°C, **LP Type:** 25 °C - 40°C When working at a higher temperature than recommended, the pot life will be shortened. Similar when working at lower temperatures, the material will become more difficult to apply and takes longer to harden. Where the working temperature are above 45°C, please consult our Technical Services Department. Minimum thickness per coat: 1 cm Maximum thickness per coat: 6 cm
Notes	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
Safety	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Notes

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