

# PRODUCT DATA SHEET

## Sikadur<sup>®</sup>-41 CF

### EPOXY RESIN PATCHING MORTAR

#### DESCRIPTION

Sikadur<sup>®</sup>-41 CF is a thixotropic, 3-component patching and repair mortar, based on a combination of epoxy resins and special fillers, designed for use at higher temperatures between +25 °C and +45 °C.

#### USES

As a repair and bonding mortar for:

- Concrete elements
- Hard natural stone
- Ceramics, fiber cement
- Mortar, Bricks, Masonry
- Steel, Iron, Aluminium
- Wood
- Polyester, Epoxy
- Glass

As a repair mortar:

- Filling of cavities and voids
- Vertical and overhead use
- Corners and edges

As an abrasion and impact resistant wearing course:

- Joint filling and crack sealing
- Joint and crack arris / edge repair

#### CHARACTERISTICS / ADVANTAGES

Sikadur<sup>®</sup>-41 CF has the following advantages:

- Easy to mix and apply
- Very good adhesion to most construction materials
- High strength mortar
- Thixotropic: non-sag in vertical and overhead applications
- Hardens without shrinkage
- Different coloured components (for mixing control)
- No primer needed
- High initial and ultimate mechanical strength
- Good abrasion resistance
- Good chemical resistance

#### APPROVALS / STANDARDS

The product suitable to be used with sewage projects, issued by The Egyptian National Research Center Sikadur<sup>®</sup> 41CF has been tested as per SCAQMD Method 304-91

Result: VOC Content < 10 g/L.

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Epoxy resin
<b>Packaging</b>	10 Kg units (A+B+C). 10 Kg pails (A/B). 30 Kg pails (A/B). 25 Kg bags (C)
<b>Colour</b>	Part A: grey Part B: black Part C: sand Parts A+B+C mixed: concrete grey
<b>Shelf Life</b>	24 months from date of production

<b>Storage Conditions</b>	Store at temperatures between +5°C and +30°C		
<b>Density</b>	Comp. (A):		1.7kg/l.
	Comp. (B):		1.7kg/l.
	Comp. (C):		1.5 kg/l (bulk density).
	Comp. (A + B + C):		2.0 kg/l (mixed mortar).

## TECHNICAL INFORMATION

<b>Compressive Strength</b>	<b>Normal/Rapid Type:</b>	<b>L.P. Type:</b>	
	<b>after 10 days at + 10-20°</b>	<b>after 10 days at + 20-30°C</b>	
	Normal type:	65 - 75 N/mm2	55 -65 N/mm2
	After 24 hrs. at + 20°C:		
Rapid type: After 24 hrs. at + 5°C:	45 - 55 N/mm2	-	
L.P. type: After 24 hrs. at + 30°C:	40 - 50 N/mm2	40 - 50 N/mm2	
<b>Modulus of Elasticity in Compression</b>	9' 000 N/mm2.		
<b>Tensile Strength in Flexure</b>	<b>Normal/Rapid Type</b>	<b>L.P. Type:</b>	(ASTM-D-790)
	<b>after 10 days at + 10-20°</b>	<b>after 10 days at + 20-30°C</b>	
	25 - 35 N/mm2	20 - 30 N/mm2	
<b>Tensile Strength</b>	<b>Normal/Rapid Type:</b>	<b>L.P. Type:</b>	(ASTM-D-638)
	<b>after 10 days at + 10-20°</b>	<b>after 10 days at + 20-30°C</b>	
	10 - 15 N/mm2	10 - 15 N/mm2	
<b>Elongation at Break</b>	0.2 ± 0.1 % (7 days at +35 °C)		(ISO 527)
<b>Shear Strength</b>	Normal/Rapid Type:after 10 days at + 10-20°	L.P. Type:after 10 days at + 20-30°C	
	<b>Bond strength to concrete (DIN 53232)</b>	<b>concrete failure</b>	
	<b>Bond strength to Steel</b>	10 - 15 N/mm2	
	10 - 15 N/mm2		
<b>Shrinkage</b>	Hardens without shrinkage.		
<b>Coefficient of Thermal Expansion</b>	26 x 10-6 per °C (temp. range -10°C to +40°C).		

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	Comp. (A:B:C) = 2:1:3 parts by weight Normal//Rapid/L.P. 2:1:4 parts by volume Normal//Rapid/L.P.			
<b>Consumption</b>	1 m2: approx. 2 kg (1 mm thickness).			
<b>Pot Life</b>	°C	4 kg Normal	4 kg Rapid	10kgL.P
	40	-	-	~40min
	30	~ 20min	~ 10 min	~1hrs
	20	~ 1 hrs	~ 30 min	~2hrs
	10	~ 2 hrs	~ 1hrs	-
	5	~ 3 hrs	~ 1.5 hrs	-

## APPLICATION INSTRUCTIONS

## SUBSTRATE PREPARATION

All surfaces must be clean, free from oil, grease, rust, scale, frost, standing water and all loosely adhering particles.

Cement laitance must be removed. Concrete must be 3 - 6 weeks old depending on climate, sand / water blasting, grinding, scrubbing are recommended.

### MIXING

- Mix components (A + B) together for at least 2 minutes with a low speed electric drill (max. 500 R.P.M.).
- until a smooth consistency and streakfree colour are achieved.
- Then add component (C) and continue until mixing is homogeneous.
- Avoid entrapping air.

### APPLICATION METHOD / TOOLS

Apply directly to the prepared substrate by spatula, trowel or glove protected hand, depending on application.

When working on damp substrates, it is advisable to prime first with Comp. (A+B) of the mortar.

### CLEANING OF TOOLS

Clean all tools and equipment immediately after use with Sika® Colma-Cleaner.

### LIMITATIONS

Optimal working temperatures for each grade are:

Normal Type : 10°C - 30°C.

Rapid Type : 5°C - 15°C.

L.P. 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 will be above 45°C, please consult our Technical Service.

Maximum thickness per coat: 6 cm.

Minimum age of new concrete: 3- 6 weeks, depending on climate.

### BASIS OF PRODUCT DATA

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.

### LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

### ECOLOGY, HEALTH AND SAFETY

#### Ecology

- Components (A + B) contaminate water. Do not dis-

pose of into water or soil but according to local regulations.

#### Transport

- Comp. A/C: Non-hazardous.
- Comp. B Normal: 8/65 c).

#### Safety precautions

- Product may cause skin irritation. Wear gloves and goggles. If the material is accidentally splashed into the eyes, flush immediately with plenty of warm water and seek medical attention without delay.

#### Toxicity

- Comp. A/B: Class.4, under the relevant Swiss health and safety codes.
- Observe warning on packing.
- Comp. C: Non-toxic under the relevant Swiss health and safety codes.

### LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

**Sika Egypt**  
**1st Industrial Zone (A)**  
Section #10, Block 13035  
El Obour City, Egypt  
TEL: +202 44810580  
FAX: +202 44810459  
[www.sika.com.eg](http://www.sika.com.eg)



Sikadur-41CF\_en\_EG\_(09-2016)\_1\_2.pdf

Product Data Sheet  
Sikadur®-41 CF  
September 2016, Version 01.02  
020204030010000042