

PRODUCT DATA SHEET

Sikadur® ADH 1418

(formerly MBrace ADH 1418)

High strength polyester resin bonding and repair compound

DESCRIPTION

Sikadur® ADH 1418 is a two-component polyester resin compound consisting of a liquid resin and a powdered, hardener filler system in one container. It is a repair, bonding and grouting material

USES

- Repair of pre-cast concrete units
- Repair of worn or damaged concrete
- Bedding and sealing concrete units, steelwork, etc.
- Fixing tiles, slabs, pre-cast facings, etc.
- Grouting in dowel pins, rag bolts, holding down bolts and starter bars

FEATURES

- Easy to use – economical and fast Simple to batch and mix
- Versatile – has many applications
- Mix consistency can be varied according to requirements
- Excellent adhesion to most building materials (ceramics, wood, metal, stone, concrete, quarry tiles, asphalt, mortar, etc.)
- Excellent chemical resistance
- High early and ultimate strengths
- Due to the nature of the resin system, the mechanical and chemical resistance of Sikadur® ADH 1418 is constant irrespective of the volume of filler added, provided adequate compaction can be achieved
- Sikadur® ADH 1418 has low shrinkage properties and does not shrink at the bonded surface; no shrinkage occurs once hardening has taken place
- Will cure underwater and at temperatures below 0°C
- Extra sand can be added for bulk filling.

PRODUCT INFORMATION

Composition	A two-component, polyester resin and accelerator filler system Density with 3.2 to 1 mix filler to resin ratio:1920kg/m ³
Packaging	Sikadur® ADH 1418 is supplied in 15kg containers. Each container contains resin and adequate powder for normal use.
Shelf life	Up to 6 months if stored according to manufacturer's instructions in un-opened containers.
Storage conditions	Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates, the product must be stored in an air-conditioned environment. Shelf life for this product is 6 months from date of manufacture, when stored as above.
Density	1920kg/m ³

TECHNICAL INFORMATION

Compressive strength	Results are based on normal 3.2 to 1 mix by volume: Temp. Strengths in N/mm ² Strength Ultim 3 24 °C hours hours ate 20 50 89 98
Flexural-strength	Results are based on normal 3.2 to 1 mix by volume: Temp. Strengths in N/mm ² Strength Ultim 3 24 °C hours hours ate 20 1.6 31 37
Tensile strength	Results are based on normal 3.2 to 1 mix by volume: Temp. Strengths in N/mm ² Strength Ultim 3 24 °C hours hours ate 20 7.3 11.7 14
Tensile adhesion strength	9N/mm ²
Adhesion in peel	Adhesion to sound concrete: In excess of the tensile strength of concrete
Chemical resistance	Resists attack by sugar, salt, sewage, dairy produce, oil, petrol, lactic acid, etc.

APPLICATION INFORMATION

Consumption	The following coverage rates are indicative for a 15kg pack of Sikadur [®] ADH 1418: Mix by volume Yield ltr (approx.) 4:1 7.5 3:1 7.0 2:1 5.5 Sufficient filler is supplied for mixes up to 5:1
Open Time	15°C 2 hours 20°C 1 hour 25°C 30 minutes 35°C 17 minutes

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.

ECOLOGY, HEALTH AND SAFETY

As with all chemical products, care should be taken, during use and storage, to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well-ventilated areas and avoid inhalation.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Ensure surfaces are free from oil, grease, paint, curing

compounds, etc. Remove dust, laitance and friable materials by wire brushing, bush hammering or acid etching. It is preferable to abrade and roughen smooth surfaces prior to application of Sikadur[®] ADH 1418.

MIXING

Mixes normally used vary from 2:1 powder to resin up to 4:1 powder to resin by volume. The resin rich mixes are flowable, and the leaner mixes are trowellable. Mixes as lean as 5:1 can be used as space fillers; but these will not necessarily develop the full properties. Pour required quantity of resin into a clean plastic bucket and add powder filler, stirring continuously until desired consistency is reached and the mixture is smooth, lump-free and uniform in colour. Do not mix more material than can be used within 15 minutes.

APPLICATION

Sikadur® ADH 1418 should not be applied in coats thicker than 20mm. Where repairs are above 20mm, it is preferable to apply Sikadur® ADH 1418 in layers each with a maximum thickness of 20mm. Apply successive coats after the previous coats have hardened. When using material of flowable consistency, ensure material is given time to settle and self-level before proceeding. When using material of trowellable consistency, work it well into the prepared surface. Build up repair, ensuring good contact and adhesion between layers. Finishing is best effected by applying a little CLEANING SOLVENT No. 2 to the trowel. Use clean smooth tools. Layer thickness depends on location and substrate; a general guide is up to 20mm on horizontal applications, 12mm on vertical applications and 4-6mm/coat on soffits.

CLEANING OF EQUIPMENT

Clean all equipment with Cleaning Solvent No. 2 before it sets.

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
egy.sika.com

Product Data Sheet
Sikadur® ADH 1418
September 2024, Version 02.01
02020400000002023

SikadurADH1418-en-EG-(09-2024)-2-1.pdf