

## PRODUCT DATA SHEET

# Sikafloor®-045 Rapid

### RAPID-SETTING CONCRETE RAMPING & PATCHING MORTAR

#### DESCRIPTION

Sikafloor®-045 Rapid is a rapid setting concrete mortar used for ramping & patching applications for internal & external concrete.

#### USES

Applied by its self, or part of a system with suitable materials from Sikafloor®, Sikadur® SikaBond®, SikaTite® & Davco® ranges.

- Rapid setting cement based concrete repair
- Ramping mortar for transition of high to low flooring sections
- Patching floors, stairs & walls

#### CHARACTERISTICS / ADVANTAGES

- Rapid drying / Fast setting
- Internal & external applications
- Non-combustible
- Very Low VOC
- High early strength 24hrs = 29MPa
- Walkable in as little as 40-50 minutes @ 23°C
- Installation of flooring in 70-100 minutes

#### APPROVALS / CERTIFICATES

Green Star (VOC-SCQMD Rule 1168)

#### PRODUCT INFORMATION

|                              |  |
|------------------------------|--|
| <b>Composition</b>           | Polymer modified cement mortar   |
| <b>Packaging</b>             | 15 kg bag  |
| <b>Shelf life</b>            | Unopened bags can be stored for up to 9 months in a cool, dry and weatherproof environment.    |
| <b>Storage conditions</b>    | Bags must be stored off the floor. Avoid sitting bags in direct sunlight prior to application. |
| <b>Appearance and colour</b> | Grey powder  |

#### TECHNICAL INFORMATION

|                             |   |
|-----------------------------|---|
| <b>Compressive strength</b> | 1 day cure – 29 MPa<br>28 day cure – 48 MPa |
| <b>Water absorption</b>     | Porous                                      |

## SYSTEM INFORMATION

| System structure | Porous Concrete               | Very Porous Concrete                  | Non-porous Surface            |
|------------------|-------------------------------|---------------------------------------|-------------------------------|
|                  | Sikafloor®-045 Rapid          | Diluted Sikafloor® 01 Primer or Water | Sikafloor®-14 Prep N Prime    |
|                  | Subsequent suitable materials | Sikafloor®-045 Rapid                  | Sikafloor®-045 Rapid          |
|                  |                               | Subsequent suitable materials         | Subsequent suitable materials |

## APPLICATION INFORMATION

|                             |  |
|-----------------------------|--|
| Mixing ratio                | 2.9 - 3.1 Litres of clean, cool water                          |
| Yield                       | 9L - 9mm @ 1m <sup>2</sup>                                     |
| Layer thickness             | 1 - 50mm   |
| Ambient air temperature     | 10°C - 35°C  |
| Pot Life                    | 10 minutes @ 23°C  |
| Initial set time            | 15 minutes @ 23°C  |
| Final set time              | 17 minutes @ 23°C  |
| Waiting time to overcoating | Allow 60 – 90 minutes at 23°C prior to subsequent applications |

## BASIS OF PRODUCT DATA

safety-re-lated 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.

## IMPORTANT CONSIDERATIONS

### LIMITATIONS

- Do not install Sikafloor®-045 Rapid over particle-board, hardwood floors, parquet floors or metal.
- Do not mix or apply Sikafloor®-045 Rapid in temperatures below 10°C and above 35°C and under hot and windy conditions.
- Keep product cool prior to mixing and do not leave bags in direct sun for extended periods.
- Protect from hot or strong winds and extremes of temperature for 12hrs after being applied to avoid rapid moisture loss leading to cracking or crazing.
- All construction/expansion joints in existing concrete must be reflected through Sikafloor product as soon as possible to do so.
- Not recommended as a trafficable surface.

## ECOLOGY, HEALTH AND SAFETY

### CLEANING

Clean tools and equipment with warm water and detergent while the product is still wet.

### HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other

# APPLICATION INSTRUCTIONS

## EQUIPMENT

High speed heavy duty electric drill and mixing paddle.  
Suitable size bucket/vessel - 20L +

## SUBSTRATE QUALITY / PRE-TREATMENT

Concrete floors should be fully cured, structurally sound, clean, dry, and free of surface contaminants and dust for Eg. Concrete must be porous and accept water penetration. Test by lightly sprinkling water on various areas of the substrate. If water penetrates, then a good bond with Sikafloor®-045 Rapid can be achieved. If water beads and fails to be absorbed by the concrete surface contaminants are present then loss of adhesion may occur. Contaminates that are present should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. If the concrete substrate has efflorescence or high moisture (RH) and moisture sensitive flooring is being installed, Sikafloor® Moisture Barrier System may be considered (Sikafloor®-158 W Fast Barrier + Sikafloor®-14 Prep N Prime + Sikafloor®-045 Rapid). Contact your local Sika® office for further information.

### Priming:

A bond strength of 1.2MPa between Sikafloor®-045 Rapid to a smooth porous concrete surface can be achieved without the use of a primer. For optimal adhesion or if the concrete is extremely porous (mechanically prepared or broken concrete) a Sikafloor® Primer or pre-dampening with water may be considered. The use of a primer or wetting the surface with water enhances bond strength and reduce rapid moisture loss from mortar giving longer working time. See applications for further details.

## MIXING

Mix the entire 15kg bag of powder with 2.9 - 3.1 Litres of clean, cool water. Slowly add powder to the water while mixing with a suitable electric drill and mixing paddle. Thoroughly mix for only 1 minutes to a lump free consistency and apply directly. Not mixing for the recommended time or additional water may result in product irregularities and possible product failure.

## APPLICATION

### Using Sikafloor®-045 Rapid prior to floor coverings:

Grading/Ramping

Once product is mixed immediately apply and begin working to heights required. Product can be worked/shaped/shaved with the back of a trowel up to 20 minutes after application.

### Using Sikafloor®-045 Rapid to repair concrete:

Patching concrete

On a well prepared clean and roughened concrete surface a bonding primer is generally not required, but pre-dampening of the surface with water is recommended. After water has been applied and allowed to soak the concrete surface should achieve a dark matt appearance without glistening and surface pores and pits shall not contain water. The surface shall not be allowed to completely dry before application of Sikafloor®-045 Rapid.

If priming is preferred first diluted Sikafloor® 01

Primer 1:3 with water then apply by way of a brush till all areas have been coated and allow to dry. Once placed, a trowel is used to pack & shape Sikafloor®-045 Rapid into the concrete void. Sikafloor®-045 Rapid can also be left high of the finished surface required and shaved using the trowel until full set. Working time 15 - 20 min @ 23°C.

Note: Freshly applied Sikafloor®-045 Rapid must be protected from damp, condensation and all forms of water while curing for at least 24 hours.

## LOCAL RESTRICTIONS

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

## 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.

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**Product Data Sheet**

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