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Technical Data Sheet

INDUCRET®-VK5000

Grout for block pavers

Art.-No. 5 55087

Properties:

INDUCRET-VK5000 is a two component pre-filled epoxy resin paving grout with the following properties:

- Self compacting
- Solvent free
- Low odour
- Non sensitive to moisture
- Water permeable
- Resistant to de-icing salts
- Easy to use
- Highly resistant to mechanical wear (resistant to sweeping and cleaning machines)
- High compressive and flexural strength
- Resistant to petrol, mineral oils and de-icing salts

Areas of application:

INDUCRET-VK5000 is used to grout natural stone pavers.

- Existing and new pavers
- Joint widths from 8mm
- Joint depths from min. 30mm

Notes:

A substrate designed to meet the requirements of the paving must be present.

Typical Properties:

Basis: 2-comp. epoxy resin
Colour: sand coloured

On request: grey and basalt

Viscosity: mortar

Density: approx. 1.50 g/cm³

Working time

(ability to flow): at +10 °C

approx. 25-35 mins

at +20 °C

approx. 15-20 mins

at +30 °C approx 7-10 mins Application time: $at + 10 \, ^{\circ}\text{C}$

approx. 40-50 mins

at +20 °C

approx. 25-35 mins

at +30 °C

approx 12-15 mins

Application temperature: min. +10 °C, max. +30 °C

Foot traffic: $at + 10 \, ^{\circ}\text{C}$

approx. 16-20 hours

at +20 °C

approx. 8-12 hours

at +30 °C

approx. 6-8 hours

Light loading: at +10 °C approx. 48 hours

at +20 °C approx. 24hours at +30 °C approx. 20 hours

Full load/service: at +10 °C approx. 10 days

at +20 °C approx. 7 days at +30 °C approx. 3 days

Technical Properties:

Compressive strength

after 7 days (+20 °C): approx. 55.6 N/mm²

Flexural strength

after 7 days (+20 °C): approx. 20.5 N/mm²

Modulus of lateral extension

after 7 days (+20 °C): approx. 9.8 N/mm²

Longitudinal modulus

after 7 days (+20 °C): approx. 33.0 N/mm

Note: the strength figures are only valid in the compacted state.

The following regulations are to be noted:

- Information sheet on paved areas with pavers and slab finishes.
- Additional technical codes and guidelines for earthworks in road construction (ZTVE-StB).

INDUGRET®-VK5000

- Additional technical codes and guidelines for the implementation of ground stabilisation and ground improvements in road construction (ZTVE-StB).
- Guidelines for the standardisation of paved areas for vehicular traffic (FSTV).
- RstO: construction methods with paved finishes for roadways (FGSB 19896).

Substrates:

- Existing and new paving on a stable sub-base
- Joint widths from 8mm
- Joint depths from min. 30mm

The area where the product will be applied must be: Dry, sound and load bearing

Free from separating and adhesion inhibiting substances

Dependent on the condition of the substrate the following preparation methods are suitable:

 Brushing, sweeping, vacuuming, jet washing, high pressure washing

Where there will be high mechanical stress the paving blocks must be buried a minimum of 3/4 into the mortar bed. A substrate designed to meet the requirements of the paving must be present.

Product preparation:

Prior to application shake the binder into the quartz sand and thoroughly mix. Decant the mixed mortar into a clean mixing container and mix once again. To achieve a flowable consistency add up to a maximum of 10% = 2.5 litres of water. Too little water worsens the application and can lead to an intense film formation on the surface of the stone.

Mixing should be carried out with a suitable stirrer (e.g. counter rotating twin paddles). The material temperature should be approx. +10 °C when mixing.

Advice: Forced paddle mixers (e.g. Zyklos or Utz) increase the mix quality.

Application method:

Pre-wet the paving surface – in high temperatures it is necessary to pre-wet intensively. Tip the prepared paving mortar INDUCRET-VK5000 onto the surface of the pavers and push evenly into the prepared joint void. After waiting for 10 to 20 minutes (dependent on the temperature) sweep away the residual mortar from the stone surface with a medium bristled brush.

After grouting in, a thin fine binder film remains on the surface of the pavers that leaves the stone surface more intense in appearance and leaves behind temporary protection against moss formation and contamination. A yellowing is to be expected due to the binder.

Productivity:

Subject to the temperature and a water addition of 10%, 1kg of flow applied cured mortar gives 0.725 – 0.775 litres.

Estimating & Supply:

Consumption: Consumption for a joint 30mm deep (see table next page)

INDUGRET®-VK-5000

	Length	Width	Joint width	Consumption
	(mm)	(mm)	(mm)	(kg/m²)
Large pavers	120	120	10	8.0
	120	180	15	9.5
	140	140	15	10.0
	140	200	15	8.5
Small pavers	80	80	10	11.0
	90	90	10	10.0
	100	100	10	9.0
Mosaic	40	40	8	15.5
	50	50	8	13.0
	60	60	8	11.5

Packaging:

INDUCRET-VK5000 is available in 25kg packs. The quartz sand mix and the binder are kept separated.

Cleaning & Equipment Maintenance:

Clean work tools with water immediately after use.

Storage & Shelf Life:

12 months when stored dry and cool above +10 °C in the original unopened packaging.

Physiological behaviour and protective measures:

Once cured INDUCRET-VK5000 is considered harmless. The hardener (B) component is corrosive. Current relevant legislation should be followed at all times when working with epoxies, e.g. hazmat transportation, etc. For more information please consult www.plasticseurope.org.

Important advice:

- Higher temperatures shorten the pot life. Lower temperatures increase the pot life and curing time.
 Material consumption is also increased at lower temperatures.
- To increase pot life/working time at higher temperature store material in a cool environment above +10° C and only expose to warm temperature shortly before mixing.
- Humidity > 75% increases the setting time.
- Post application treatment: Protect the freshly pointed pavers from precipitation for a minimum of 24 hours.
- Applications that are not clearly explained in this technical data sheet may only be carried out after consultation with and written confirmation from the Technical Services Department of SCHOMBURG ICS GmbH.

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