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Product Data Sheet

INDUGROUT-EP100

Art.-No. 5 55056

THREE-COMPONENT, SOLVENT-FREE, HIGH-PERFORMANCE, FREE-FLOWING EPOXY GROUT

Product Description:

INDUGROUT-EP100 is a three-component, solvent-free, non-shrink, high-performance, epoxy-resin, free-flowing grout for gaps of 10 mm to 100 mm. INDUGROUT-EP100 is based on a selection of epoxy resins, curing agents, and hard & inert aggregates that – when mixed – provide a grout of excellent adhesion with high early and final compressive & mechanical strengths, in addition to good chemical resistance.

Primary Uses:

INDUGROUT-EP100 is typically used to grout:

- Under machinery plates exposed to high.
- Dynamic loads or vibrations.
- Under machinery that will be exposed to.
- Chemical attack.
- Under bridge bearing pads.
- Crane rails.
- High strength anchoring bolts.
- Large area cavities in the concrete.

Advantages:

- Easy to mix and apply.
- Solvent-free; 100 % solids.
- Non-shrink curing ensures full adhesion.
- Excellent flowability.
- Rapid strength development.
- Excellent chemical resistance & durability.
- Suitable for application on damp or dry substrates.

Standards:

INDUGROUT-EP100 is formulated to comply with all the requirements of ASTM C-881: „Epoxy resin-based Bonding Systems for concrete ".

Technical Properties:

Appearance	: free flow grey liquid.
Density	: 2.0 g/mm^3 at 20ºC.
Pot-life	: 120 minutes at 23ºC
Chemical Resistance	: reagents & chemicals; including salt water, organic & inorganic acids, alkalis, etc.
Flash Point	: > 200ºC.
Water absorption (ASTM D-570)	: 0.10%

Compressive strength (ASTM D-695):

65 N/mm^2 after	: 6 hours.
90 N/mm^2 after	: 24 hours.
105 N/mm^2 after	: 7 days.
Flexure strength (ASTM D-638)	: 40 N/mm^2.
Tensile strength (ASTM D-638)	: 15 N/mm^2.

Bond strength (ASTM C-882):

Concrete	: 4 N/mm^2.
Steel	: 15 N/mm^2.
Coefficient of thermal expansion	: 42 x 10-6 mm/mm/ºC.

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Tools:

Surface preparation:
Use chisel, grinder (such as High Grinder 125.4RO* or similar), sand-blasting, water-blasting or grit-blasting equipment.

Mixing:
Use a spiral mixing paddle (such as MG140*) & a variable slow speed mixer (such as High Mix EHR23*).

Pouring:
Use plastic or steel buckets & funnels.

* Denotes equipment supplied by
HTG HIGH TECH Germany GmbH.

Surface Preparation:

Areas to be treated must be sound, and free from adhesion inhibiting substances such as dust, laitance, grease, rust, etc. Dependent on the type and condition of the substrate use suitable means of preparation such as scabbling, grit-blasting, water-blasting or shot-blasting. The following criteria must also be respected, dependent on substrate type:

Cement-based:

Concrete quality	: min. C20/25.
Age of substrate	: min. 14 days.
Tensile adhesion strength	: > 1.5 N/mm.

Iron and steel:
Surfaces are to be abraded to a bright white metal finish in accordance with Swedish Standard SA 2&1/2. Apply INDUBOND®-VK4032-ACI immediately before fresh scale is formed.

Shuttering:
Erect a water-tight shutter around the base plate at appropriate distance (for visual & physical inspection) and ensure that a hydrostatic head is created at one side of the formwork. Shuttering should be coated with an oil-based de-moulding agent such as BLANKOL-NATIV and left to dry before grouting. Please refer to method statement for more details.

Mixing:

All three components, A (resin), B (hardener) and C (filler) are delivered in a predetermined mixing ratio. Empty the entire contents of component B into the component A container. Mechanically stir using appropriate mixing paddle attached to a slow speed mixing drill (300 to 400 RPM) until a homogeneous and well dispersed mixture is obtained. Gradually add component C, while mixing and continue thorough mixing until a homogenous flowable mixture is obtained. Ensure that no unmixed material is left on the sides and bottom of the container. Decant the material into a clean container and thoroughly mix once again for 3 minutes. The material temperature during mixing should always be 30° C or lower.

Method of Application:

Placement:
It is important to make available ample product and ensure a steady & continuous pouring process to prevent air entrapment or pocket formation. Mixing & pouring times per kit should be carefully considered to avoid any discontinuation of any single pour. Rodding or vibrating is not required as INDUGROUT-EP100 is a free-flowing grout. Always place grouts from one side of the base plate only, whilst maintaining a constant „liquid grout“ head until the grout rises at other sides of the base plate. The constant liquid head prevents air pocket formation under the base plate and assures proper adhesion and contact (effective bearing area). Do not apply at thicknesses lower than 10 mm. Do not exceed 100 mm layer thickness in any single application. Refer to the method statement for more details.

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Curing:

INDUGROUT-EP100 does not require any particular curing after placement. Protect uncured products from rain & moving water. Once hardened no curing procedures are required.

Estimating & Supply:

Packaging:
INDUGROUT-EP100 is supplied in 30 kg kits consisting of 3 components. All components are delivered at a predetermined mixing ratio.

Yield:
INDUGROUT-EP100: approx. 2 kg/litre or 20 kg/10 mm thick gap/m^2. Higher consumption is expected on rough surfaces. Always allow for wastage when calculating quantities to order.

Cleaning & Equipment Maintenance:

During continued application, all tools must be regularly & thoroughly cleaned with INDU-IB-Cleanser every 30 to 45 minutes (dependant on temperature) to prevent the product from setting on tool surfaces. Thorough cleaning must also be carried out immediately at the end of works or whenever work is suspended. Cured material can only be removed mechanically.

Storage & Shelf-life:

INDUGROUT-EP100 has a shelf life of 24 months when original, unopened containers are stored in a dry and frost-free environment above 5ºC.

Health & Safety:

Once completely cured, INDUGROUT-EP100 is harmless. The hardener (component B) is corrosive. Therefore, implicitly ensure that the hardener does not come into contact with skin. Always wear protective gloves and adequate eye protection when working with this product. Clean up contamination with plenty of water and soap, preferably with the addition of 10% household vinegar. Should splashes get into the eyes, rinse immediately with plenty of water and seek immediate medical help with reference to the current valid Material Safety Data Sheet. Adhere to the general government health and safety protective directive.

Important advice:

- Always mix a full pack. Do not mix part packs.
- Do not expose applied material before the initial cure to moving water.
- Protect from the rain before initial cure to prevent surface deformations.
- Lower site temperatures may reduce workability whilst reaction times (pot life & full cure) are extended. Higher temperatures shorten the pot life.
- 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.
- INDUGROUT-EP100 is classified as non-hazardous in accordance with the Ordinance on Hazardous Substances GefStoffV.

Please observe the current EU health and safety data sheet.

GISCODE: RE 1

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