

ArmGrout EP-100

(Formerly known as MYK INDUGROUT-EP 100 (I))

Three-component, solvent-free, high performance, free-flowing epoxy grout



TECHNICAL DATA SHEET

Product Description

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

Uses

ArmGrout EP-100 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 concrete.

Features and Benefits

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

Application Methodology

Step no 1: Application Procedures Tools:

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

Step no 2: Surface Preparation:

Areas to be treated must be sound, and free from adhesion inhibiting substances such as dust, laitance, grease, rust, etc. smooth surface. It shall be applied onto the dry concrete surface.

Dependent on the type and condition of the substrate use suitable means of preparation such as scabbing, 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 ReArm Bond EBA 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-molding agent such as BLANKOL-NATIV and left to dry before grouting. Please refer to method statement for more details.



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Step no 3: Product 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 flow able 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

Step no 4: Product 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. Roding or vibrating is not required as ArmGrout EP-100 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 a thickness lower than 10 mm. Do not exceed 100mm layer thickness in any single application.

Refer to method statement for more details.

Curing:

ArmGrout EP-100 does not require any particular curing after placing. Protect uncured product from rain& moving water. Once hardened no curing procedures are required.

Cleaning & Equipment Maintenance:

During continued application, all tools must be regularly & thoroughly cleaned with FloArm Clean PU every 30 to 45minutes (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.

Technical Data

Appearance	Free flow grey liquid
Density	1.9 g/mm ³ at 27°C
Pot life	20 minutes at 27° C 45 minutes at 15° C
Chemical Resistance	Reagents & chemicals; including salt water, organic & inorganic acids, alkalis, etc.
Flash Point	> 200° C Water
Absorption (ASTM D-570)	0.100%
Compressive strength @ 27°C (ASTM D-695)	
6 hrs	30 N/mm ²
12 hrs	65 N/mm ²
1 day	80 N/mm ²
7 days	90 N/mm ²
Flexural strength @ 7 days (ASTM D638)	25 N/mm ²
Bond Strength concrete failure @ 7 days (ASTM C-882)	>4 N/mm ²
Co effect of thermal	6 mm/mm/°C
Expansion	42 x 10

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Annotation

- Always mix a full pack. Do not mix part packs.
- Do not expose applied material before initial cure to moving water.
- Protect from 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 MYK Arment.
- During summer when temp is above 27 °C please ensure substrate is cool enough or prefer to do grouting in the early morning (between 5 to 9 am) (I)

Health & Safety

Once completely cured, ArmGrout EP-100 is harm- less. 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.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and food stuffs (which can also be tainted with vapour until product is fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. ArmGrout EP-100 should be applied with gloves and care should be taken to see that it does not fall on skin or eyes. Splashes on eyes have to be immediately washed with plenty of clean water and medical advice has to be taken.

Yield:

ArmGrout EP-100: approx. 1.9 kg/liters or 19 kg/10 mm thick gap/m².

Higher consumption is expected on rough surfaces. Always allow for wastage when calculating quantities to order.

Packaging

ArmGrout EP-100 is supplied in 15 kg kits consisting of 3 components. All components are delivered at a predetermined mixing ratio.

Storage and Shelf Life

Arm Grout EP-100 has a shelf life of 12 months when original, unopened containers are stored in a dry and frost-free environment above 5° C.

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Product Categories Available



Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability 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 & purpose. MYK Arment 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.