

# Expangrout\* AG

## High strength, two part epoxy resin anchoring grout

### Uses

High strength chemical resistant heavy duty anchoring grout for permanent fixing of bolts, tendons or dowels in drilled or formed holes located in concrete, masonry, brickwork, or in natural rock/stone, suitable for but not limited to:

- Structural connections with post-installed re-bars
- Façades
- Anchor bolts
- Structural renovation of buildings, bridges and other civil structures, retrofitting and re-strengthening of concrete.
- Crack filling / minor repair in concrete structures

### Advantages

- Easy to use
- Long working/pot life
- Suitable for tropical environment
- High compressive, tensile and flexural strength
- Early strength gain
- Vibration resistant
- Corrosion resistant
- Chemical resistant

### Description

Expangrout\* AG is a two-component pure epoxy anchoring grout, supplied in pre-weight packing (Base & Hardener) just mix at site before application, Designed for most demanding structural applications and rebar connections, Expangrout\* AG offers high load-bearing capacity.

### Technical support

Fospak offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Fospak offers a technical support package to specifiers, end- users and contractors, as well as on-site technical assistance in locations all over the country.

### Design criteria

Expangrout\* AG grout to be used will depend upon ambient temperature and anchor conditions.

The high strength of the cured epoxy resin permits strong anchors to be created. The ultimate strength developed depends upon:

Strength of host material  
Length of resin bond to bar  
Hole preparation and formation  
Type and dimension of bar.

Optimum performance of Expangrout\* AG grouts requires rough sided, dust free holes. These can be made by using rotary percussive drills followed by oil-free air flushing.

Cast holes should be of inverse dovetail configuration. If parallel sided holes are cast, they should be rough enough to provide an adequate mechanical key.

All bars should be deformed. This will ensure good bond between the bar and the grout.

Bars should be degreased and any mill scale or flaky rust must be removed prior to the anchoring.

### Properties

<b>Appearance</b>	: Thixotropic paste
<b>Solid contents</b>	: 100%
<b>Compressive strength</b>	: 70 N/mm <sup>2</sup> @ 7 days
<b>Tensile Strength</b>	: 18 N/mm <sup>2</sup> @ 7 days
<b>Flexural Strength</b>	: 35 N/mm <sup>2</sup> @ 7 days
<b>Pot life</b>	: 110 minutes @ 25°C 80 minutes @ 35°C
<b>Drying time</b>	: 10 hours @ 25°C 4 hours @ 35°C
<b>Chemical resistance</b>	: Resistant to oils, fats, petrol, salt and sugar solution, bleach dilute mineral acids, alkalis, white spirit. Not resistant to xylene.
<b>Color</b>	: Grey

## Instructions for use

### Substrate preparation:

Concrete surfaces should be clean, dry and free from laitance. All blow holes should be 'opened up' to avoid the creation of air pockets. This is best achieved by sandblasting or mechanical/manual wire brushing, as necessary.

### Mixing:

Care should be taken to ensure that Expangrout\* AG is thoroughly mixed to produce a fully homogeneous paste.

The 'hardener' and 'base' components should be stirred thoroughly in order to disperse any settlement before mixing them together. The two components should be mixed together in a specified ratio as mentioned on each component packing, mix until uniform consistency and grey colour is achieved.

### Application:

Due to the easy workability of the product, a variety of instruments such as sealant gun, trowel, scraper or filling knife can be used for application. After mixing, material can be taken directly from the can, or subdivided onto spot boards for individual applicators.

### Cleaning:

Expangrout\* AG should be removed from tools, equipment and mixers with Expanchem Solvent 102\* immediately after use. Hardened material can only be removed mechanically.

### Storage:

### Shelf life:

12 months if kept in unopened tins and stored in a dry place away from direct sunlight.

Store in dry conditions in the original, unopened containers. If stored at high temperatures the shelf life may be reduced to 4 to 6 months.

### Limitations:

Expangrout\* AG should not be exposed to moving water during application.

Exposure to heavy rainfall prior to final set may result in surface scour.

If any doubt arises concerning temperature or substrate condition, consult the local Fospak office.

### Precautions:

#### Health and safety:

Some people are sensitive to epoxy resins so gloves and barrier creams such as Kerodex 71, Rozalex 9, Debba- Wet work or similar should be used when handling these products. If contact with the resin occurs, it must be removed before it hardens with a resin removing cream such as Rozalex 42 or Kerocleanse 22 followed by washing with soap and water.

Avoid contact with skin and inhalation of vapours. Gloves and overalls should be worn.

For further information consult the Material Safety Data Sheet available for this product.

#### Fire:

Expangrout\* AG is non-flammable.

Solvent 102 is flammable. Keep away from sources of ignition.

#### Estimating:

#### Supply:

Expangrout\* AG : 1. & 2.50 Kg. Pack

Expanchem Solvent 102 : 5.0 liter cans

\* Denotes the trademark of Fospak (Pvt) Ltd.

## REGIONAL SALES OFFICES IN PAKISTAN:

### Fospak (Pvt) Ltd.

#### Head Office

702, Business Avenue,  
Block-6, PECHS,  
Shahra-e-Faisal,  
Karachi, Pakistan  
Tel # +92-21-34528477, 34529859  
Fax # +92-21-34522436  
Email [info.khi@fospak.com.pk](mailto:info.khi@fospak.com.pk)

#### Lahore Sales Office

2<sup>nd</sup> Floor Sarwar Shaheed Plaza,  
Cavalry Ground,  
Main Boulevard,  
Lahore Cantt, Lahore.  
Tel # +92-42-36675773  
Fax # +92-42-36675838  
Email [info.lhr@fospak.com.pk](mailto:info.lhr@fospak.com.pk)

#### Islamabad Sales Office

Plot # 169, Street # 9,  
Industrial Area, I 10/3,  
Islamabad  
Tel # +92-51-4100169  
Fax # +92-51-4100169  
Email [info.isb@fospak.com.pk](mailto:info.isb@fospak.com.pk)

### Important note

Fospak products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fospak endeavours to ensure that the technical information on this data sheet is correct at the time of printing, it is the customer's responsibility to satisfy himself, by checking with the company that this information is still current at the time of use, that the product is suitable for the intended application, and that the actual conditions of use are in accordance with those recommended. Because Fospak has no control over the conditions of use of its products, all recommendations or suggestions regarding the use of these products are made without guarantee.