



# KUT EPOXY GROUT NO. 4

## Non-Shrink Free Flow Epoxy Grout

GAP – 06 - 0104

### DESCRIPTION

**KUT EPOXY GROUT NO.4** is a 100% solids, three component free flow, non-shrink epoxy grout formulated to provide easy placement. It provides high strength and creep resistance combined with the highest effective bearing area. These properties in combination with its impermeability to moisture, makes it best suited for pilecap waterproofing applications.

### USES

- **KUT EPOXY GROUT NO.4** is used for all grouting applications especially those requiring chemical resistance and heavy duty resistance to vibrational and other dynamic or mobile loads.
- Applications include crane and transporter rails, compressors, High speed turbines and centrifuges, rock crusher and pulping machines and other heavy duty equipment.
- It can also be used for anchoring steel bar with concrete.

### ADVANTAGES

- Dynamic load resistance due to high flexural, tensile and compressive strengths and excellent adhesion to concrete and metal surfaces.
- Rapid installation and strength gain leading to early commissioning.
- Excellent chemical resistance to most acids, alkalies, oils, petrol and water.
- Low creep characteristics under continuous loads.

### TYPICAL PROPERTIES

- **Volume change, ASTM C-827** : 0.00% shrinkage (0.00% expansion after set).
- **Effective Bearing Area** : 95% minimum.
- **Creep, FSP creep** :  $4.4 \times 10^{-3}$  inches/inches at 180°F and 400 psi at 1 year.
- **Compressive strength** : **ASTM C-579** Method B: 75N/mm<sup>2</sup> - 24 hrs, 105 N/mm<sup>2</sup> - 7 days.
- **Tensile strength**: **ASTM C-307** : 13 N/mm<sup>2</sup>.
- **Flexural strength**: **ASTM C-580** : 35 N/mm<sup>2</sup>.

- **Linear Coefficient of thermal expansion ASTM C-531** :  $15 \times 10^{-6}$  in/in° F.
- **Bond to concrete** : Concrete failure.
- **Impact strength** : Better than concrete

### FLOW

Flow is dependent upon gap width, grout head (100-300 mm is normal) and temperature. At 20° C a 200 mm head and average gap widths, the flow is in excess of 1 m.

### LIMITATIONS

Do not apply at temperatures less than 5° C. Ensure that all surfaces are substantially dry. Ensure that the filler is added to the mixed base and hardener immediately after mixing to reduce the heat evolved.

### APPLICATION

Clean the concrete, removing any loose material, laitance, grease and oil. Fix standard formwork ensuring that the area is grout tight. The metal surfaces should be grease and oil free and any rust or paint should be removed by grit blasting or wire brushing.

Pour the hardener into the base can and mix thoroughly for 3 minutes. Pour the mix into a suitable clean tub and add the filler gradually whilst mixing with a slow speed drill and paddle. Alternatively use a mechanical mixer for 2 to 5 minutes until a consistent grout is obtained. Pour the grout quickly into position.

When pouring the grout, ensure that sufficient grout is available to maintain a grout head until the pour is complete. Grout is poured from one side to avoid air entrapment. Rods and Plungers may be used to facilitate placement.

When working on open area and in large grout pours additional aggregates of size 3/8" dry, clean and of good quality may be added. The proportions are dependent on gap dimension and mix consistency requirement, a maximum of 10 kgs of these aggregates can be used per pack of **KUT EPOXY GROUT NO.4**. The strengths obtained are generally higher by about 5-10%.



Specialities Construction  
Chemicals Factory

Amghara Industrial Area, P.O.Box: 23595 Safat, 13096 Kuwait, Tel: +965 4565165 - 4565145 Fax: +965 4565135  
Email: technical@aspeckuwait.com



## POST PLACEMENT PROCEDURE

Do not wet cure **KUT EPOXY GROUT NO.4**. It is a chemical curing material. All surfaces, equipment, and tools may be cleaned with lacquer thinner, ketones, or similar solvent before grout hardens.

In-service operation may begin immediately after minimum required grout strengths have been achieved. Final finishing of exposed surfaces is aided by applying a very light mist of solvent just before material becomes unworkable.

**PACKAGING AND YIELD : KUT EPOXY GROUT NO.4** - 21.6kg Pack, Yield 10.535 litres.

## PRECAUTIONS

**Cleaning** : Spillages should be absorbed with sand or earth etc. and disposed in accordance with local regulations.

**Storage** : Store in dry conditions upto 20° C. Shelf Life 1 year.

**Fire resistance** : The product is not flammable but will burn in a fire.

## PERFORMANCE STANDARDS

The applicable specifications for performance and testing are:

**ASTM C - 827**  
**ASTM C - 579**  
**ASTM C - 580**  
**ASTM C - 307**  
**ASTM C - 531**

## HEALTH AND SAFETY

**KUT EPOXY GROUT NO, 4** should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalation of vapours. Some people are sensitive to epoxy resins, therefore, protective gloves, goggles and barrier cream should be used. Ensure adequate ventilation and if working in enclosed areas, suitable breathing apparatus must be used. If mixed resin comes in contact with skin, it must be removed before hardening with a resin removing cream followed, by washing with soap and water. Contamination of skin by non-resin based products should be removed immediately with soap and water. Should accidental eye contamination occur with any of the above products, wash well with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting.

**ASPEC** endeavours to ensure that any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

**Distributor:**