

KUT EPOXY GROUT PC - 1

Non-Shrink Free Flow Epoxy Grout

GAP-17-1110



DESCRIPTION

KUT EPOXY GROUT PC - 1 is a high performance non-shrink, solvent-free impermeable epoxy mortar for pile capping surfaces to ensure the proper transmission of static and dynamic loads to the foundations. These properties combined with its impermeability to moisture, make it ideal for pile cap waterproofing applications.

USES

KUT EPOXY GROUT PC - 1 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

KUT EPOXY GROUT PC - 1 is a three component system that includes a two-part epoxy resin and carefully blended aggregate. At elevated temperatures, **KUT EPOXY GROUT PC - 1** provides excellent resistance to creep, high compressive strength, modulus of elasticity and excellent resistance to cracking. This product also produces a high percentage of bearing surface, and good adhesion to steel and concrete, **KUT EPOXY GROUT PC - 1** is chemically stable for temperatures up to 150°C.

The product is easily mixed on-site to a pourable consistency, **KUT EPOXY GROUT PC - 1** is suitable for an application thickness range of 20mm-150mm above which steel reinforcement should be used.

KUT EPOXY GROUT PC - 1 is resistant to oil, synthetic lubricants, water and most chemicals, and cures quickly which means the pile cap can be placed and waterproofed rapidly

- Versatile application thickness.
- High tensile, flexural and compressive strength.
- Excellent adhesion to steel and concrete.
- Rapid installation and strength gain.
- Excellent fatigue resistance.
- High resistance to dynamic loads and chemicals attack.
- Non-shrink and tolerant of damp surfaces.

TYPICAL APPLICATIONS

- Anchors, rails and bolt fixing
- Structural filling of holes and cavities in concrete.
- Bridge bearing seats.
- Pile cap waterproofing.

PACKAGING AND YIELD

KUT EPOXY GROUT PC - 1 is supplied in 34kg Pack, Yield 15 liters, comprising components weights:

Base	2.700 kg
Reactor	0.900 kg
Aggregate	30.400 kg
Total pack weight	34 kg

TYPICAL PROPERTIES

Compressive strength-

ASTM C 579	65N/mm ² at 1 day
Method B at 25°C	70N/mm ² at 3 days
	80N/mm ² at 7 days
	95N/mm ² at 14 days
Density ASTM C905	2240 kg/m ³
Resistance to water	Impermeable

CHEMICAL RESISTANCE

KUT EPOXY GROUT PC - 1 resist non –oxidising mineral acids and salts, caustics, dilute oxidizing acids and salts plus some organic acids and solvents. For more specific information contact our representative. A surface thermometer and field judgment should be used to determine actual cure rates. Cured grout should have solid, almost metallic ring when struck lightly with a hammer, checking as close to the base as possible.

APPLICATION THICKNESS

KUT EPOXY GROUT PC - 1 can be used for thick section application. The following procedures describe installation of **KUT EPOXY GROUT PC - 1**:



مصنع التخصصية لكيمياويات البناء
SPECIALITIES CONSTRUCTION CHEMICALS FACTORY

Marketed by: Alghanim Specialities Co. W.L.L.
Amghara Industrial Area, P.O.Box: 23595 Safat, 13096 Kuwait
Tel: 1802550 – 400 - Fax: +965 24582548 - Email: sales@spec-kw.com



CONCRETE PREPARATION & SEALING

Surface preparation:

As with all epoxy resin applications the quality of surface preparation has a direct effect on the performance and durability of the system. Concrete surfaces should be sound, dimensionally stable, clean, free from laitance, paint, oil, grease, mould release agent and residual curing compound. The concrete surface must be chipped so that large aggregate is exposed to ensure removal of all laitance and weak surface material. New concrete should have a compressive strength of at least 25 MPa; greater strength is preferred. **THE CONCRETE SURFACE MUST BE CLEAN AND DRY WHEN THE GROUT IS POURED.** The concrete areas to be grouted should not be primed or sealed.

Do not apply **KUT EPOXY GROUT PC – 1** when the contact surfaces are less than 10°C. If the ambient temperature is less than 0°C then artificial heating may be used.

In summer weather shade host concrete from direct sunlight.

MIXING

Do not split packs or alter the ratio of resin components in any way. Mix with a slow speed drill and paddle. Add the contents of the reactor container to the base component in a suitable mixing vessel, ensuring complete transfer of both resin components.

Mix for one minute before slowly adding the aggregate and continue mixing until a pourable consistency is achieved. Do not over mix as this may entrain air.

METAL PREPARATION AND PRIMING

Metal surfaces or components to be bedded, should be free from any rust or scaling. Base plates or rails and other metal surfaces to be grouted should be cleaned to obtain proper adhesion. This is preferably done just prior to grouting. Primer should be used **ONLY** when a long delay between cleaning and grouting will allow rusting or contamination.

Surfaces where a bond is not desired should be protected with heavy coats of wax.

FORMING

KUT EPOXY GROUT PC – 1 requires forms. Forms are generally wood, the same as used for forming concrete.

They should be of sufficient strength, anchored or braced to withstand pressure from the grout and must be liquid tight. Wrapping forms in polyethylene will ensure clean release.

PLACING

Place immediately after mixing, into the prepared area and use a steel trowel to level.

Allow the grout to set prior to removal of formwork (normally after 6 hours).

CURE TIME VS. TEMPERATURE

Cure time of the mortar will depend upon the temperature of the base and foundation rather than the ambient air temperature. Unless the ambient air temperature has been constant for several days the base/foundation temperature will generally be lower than air temperature.

WORKING TIME

The following chart is a guide for the working time of a fresh grout mix at various ambient temperatures. The working time of a **KUT EPOXY GROUT PC – 1** mix begins when the hardener is added to the liquid.

40 – 50 min at 32°C
50 – 90 min at 21°C
90–150 min at 10°C

STORAGE

Store under cover, out of direct sunlight, and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult our Technical Services Department.

HEALTH AND SAFETY

KUT EPOXY GROUT PC – 1 is formulated for industrial and professional use only and must be kept out of the reach of children. These products contain chemicals which may be **COMBUSTIBLE** and potentially **HARMFUL** to your health if not stored and used properly. Hazards can be significantly reduced by observing all precautions which are found on material safety data sheets, and product labels. Please read this literature carefully before using the product.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product is fully cured or dried). Treat splashes to skin and eyes immediately. If accidentally ingested, seek medical attention. Reseal containers after use. For specific storage and disposal instructions refer to the Material Safety Data Sheet.

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