# Precision Extreme Life Epoxy Grout

# **Description**

**EpiMax 480 UT Precision Extreme Life Epoxy Grout** is a high strength non-shrink epoxy based grouting system offering extended work time for pump application and general long distance grout travel.

**EpiMax 480 UT** provides additional benefits to specifiers and users with excellent final cured mechanical properties. The use of a high performance epoxy grout like **EpiMax 480 UT** always maximizes the structural contact area



under the widest variety of applications and conditions. The system demonstrates significantly higher chemical resistance, lower shrinkage better dynamic load tolerance and more predictable higher mechanical strengths than cement based grouts.

EpiMax 480 UT may also be extended on site with selected graded aggregate for projects for very deep pours.

EpiMax offers a range of epoxy grouts. EpiMax 480 is the standard grade, EpiMax 480S is the standard deep pour grade and EpiMax 480 UT is the extreme life grade.

## **Advantages**

- Easy mixing add aggregate if required
- Pumpable with suitable equipment
- Good, consistent flow characteristics
- High mechanical strength
- Chemically inert
- Creep resistant

#### Typical applications

- Large volume applications
- Foundation rebuilds
- Aggressive chemical environments
- Installation of anchors and dowels

## Typical properties

- Shelf life: 2 years
- Work time: 5 hours
- Compressive strength: 98 MPa
- Tensile strength: 29 MPa
- Unextended depth of pour: 150 mm

- Very low exotherm extreme work time
- Tolerates damp surfaces
- Fast & convenient good strength gain
- Dynamic load resistant
- Non shrink
- Non conductive electrically
- Support of chemical tanks, vessels
- Precision alignment dynamic loads
- Vibration dampening for rotating equipment
- Any support with complex geometry
- Solids content: 100%
- Full cure: 96 hours at 25°C
- Compressive modulus: 4 GPa
- Maximum operating temperature: 85°C
- Extended depth of pour: 250 mm

### Foundation preparation

Concrete foundations should be at least 28 days old. Ensure the foundation is clean and free of contamination. Prepare by acid etching/neutralizing/washing, professional grinding or captive blast cleaning as applicable to expose firmly adhered aggregate. Allow to dry if wet. Always confirm preparation adequacy.

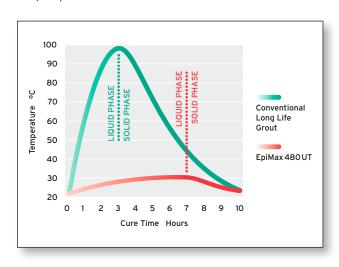
### Temperature conditioning

Precondition grout components to between 20 and 25 deg C before commencing application.

Avoid high temperatures while grouting in summer.

In hot weather, store in relatively cool shaded areas below 30°C. If grout components are above 30°C, the resulting mix will have a shortened work time. Provide shade to the overall structure from summer sunlight for at least 24 hours before and 48 hours after grouting. In cold weather, store components indoors before use.

Practical work time will depend on many factors, including grout temperature, grout section thickness, ambient temperature and the temperature and thermal demand of surroundings,



If aggregates are used, they also may need to be temperature-conditioned. Hot aggregate will reduce work time and cold aggregate will reduce flow. But cold aggregate can extend work time in hot weather applications. Aggregates should always be washed and kiln dried. Check the recommendations for storage temperatures, temperature conditioning and work time at temperature extremes. Check with EpiMax for aggregate type & use proportions.

### **Application**

Select a slow speed (400 rpm) mechanical mixer and ensure thorough mixing. Add EpiMax 480 UT Hardener to EpiMax 480 UT Compound. Mix until a uniform consistency is obtained. Avoid aeration.

Use suitable air powered commercial pump equipment, minimum 30 mm diameter hose and keep travel distances short (typically less than 10 m). Pump pressures generally range to 15 bar. Some experimentation may be required before project commencement.

For deep pours under gravity flow, EpiMax 480 UT may be extended with an appropriate aggregate. Add slowly after Hardener and Compound has been mixed. Mix until fully incorporated. Do not incorporate air into the mix. Pour the mixed system with care into the leak proof void, from the widest side and avoid air entrapment.

#### **Packaging**

EpiMax 480 UT is available in 15 litre packs (includes Hardener and Compound). It is pre-packaged in correct proportions for immediate use.

#### Safety precautions

Read Material Safety Data Sheet before commencing any application. Keep away from children. Avoid contact with skin and avoid breathing vapour. Always provide adequate personal protection (gloves & goggles etc) during use. Always provide adequate ventilation, especially in confined spaces. If poisoning occurs, call Doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, DO NOT induce vomiting. Give plenty of water or milk. If skin contact occurs, quickly remove contaminated clothing and wash affected areas thoroughly with soap and water.

TDG Code: Hardener - UN 1760, Compound - Not Classified

