



# EpiMax 496

## Precision Multi Purpose Epoxy Grout

### Description

EpiMax 496 Precision Multi Purpose Epoxy Grout is a precision multi-purpose, high strength, deep-pour epoxy grout developed for fast, permanent alignment of reciprocating and rotating equipment.

EpiMax 496 will provide superior vibration damping for all forms of dynamic loads, and a low exothermic cure allows for single pours from 50 mm to 450 mm.

EpiMax 496 provides additional benefits to specifiers and users with excellent final cured mechanical properties. The use of a high performance epoxy grout like EpiMax 496 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 offers a range of precision epoxy grouts. EpiMax 480 is the standard grade, EpiMax 480S is the standard deep pour grade, EpiMax 480 UT is the extreme life grade, and EpiMax 496 is the versatile high strength grade



### Advantages

- Multi purpose - on site variation
- Very low exotherm - deep pour
- Pumpable with suitable equipment
- Good, consistent flow characteristics
- Fast & convenient - good strength gain
- High mechanical strength
- Dynamic load resistant
- Chemically inert
- Non - shrink
- Creep resistant

### Typical applications

- Large volume applications
- Designed for static and dynamic loads
- Foundation rebuilds
- Precision alignment - dynamic loads
- Vibration dampening for rotating equipment
- Any support with complex geometry

### Typical properties

- Shelf life: 2 years
- Solids content: 100%
- Work time: 3 hours
- Full cure: 48 hours at 25°C
- Maximum depth of pour: 450 mm
- Compressive strength: 98 MPa
- Compressive modulus: 4 GPa
- Tensile strength: 19 MPa
- Maximum operating temperature: 85°C
- Fire Resistance: Self-extinguishing

---

## **Foundation preparation**

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

Note that concrete surface must be mechanically prepared so that all laitance is removed and firmly held aggregate exposed. Form up as using good quality form materials. Seal off those areas not being grouted. Forms must be liquid tight. They may be sealed with suitable silicone sealant or mastic.

Seal forms to concrete surfaces by applying sealant to concrete, then press form into place. Apply release agent to prevent adhesion to formwork.

Cover all shims, anchor bolts and levelling screws with a suitable mastic to keep the grout from adhering. EpiMax 496 exhibits good adhesion. Sleeve all foundation bolts to prevent adhesion and to allow bolt stretch. Use adequate header boxes if the grout has to flow more than one metre

## **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.

## **Application**

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

Where a highly flowable mix is required the aggregate content may be reduced somewhat. However, in structurally demanding areas, use 4 bags.

Select a slow speed (400 rpm) mechanical mixer and ensure thorough mixing. Add EpiMax 496 Hardener to EpiMax 496 Compound. Mix until a uniform consistency is obtained. Avoid aeration.

Ensure all material around bottom and sides of can is incorporated.

Then mix with EpiMax 496 Aggregate in a 10 - 20 rpm mortar mixer capable of holding around 85 litres. Add the mixed EpiMax 496 Hardener and Compound to the mortar mixer and one bag of aggregate. Progressively add the remaining bags of aggregate and mix thoroughly.

As is standard practice with cement grouts, for the first mix, withhold some aggregate to "wet" out of the mixer.

Do not over mix.

## **Packaging**

EpiMax 496 is available in 10 litre packs (includes Hardener and Compound).

EpiMax 496 Aggregate is available in 20 kg bags. It is pre-packaged in correct proportions for immediate use.

Ordering Information: 10 litre - #9049645

## **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



**EpiMax Systems Pty Limited**

Brisbane • Sydney • Melbourne • Hobart

Australia ☎ 1300 721 522 enquiries@epimax.com.au