



**PRODUCT DATA SHEET**

**PRODUCT CODE: E221**

**CHEMICAL ANCHOR (FAST CURE)**

**Description**

E221 is a 2 component low viscosity epoxy used as a flowable grout, ideally suited to a wide range of building and civil engineering applications. The product bonds to steel and concrete and is simple to mix and apply.

**Principal uses**

- As a resin for chemical anchoring
- As a grouting medium
- Fixing starter bars, bolts and other similar items, vertically down into concrete

**Advantages**

- Fast setting
- Superior adhesion to most building materials
- Stronger than surrounding concrete and steel
- High strength and modulus
- Chemical resistance
- Heat resistance characteristics

**Performance data**

Product complies to ASTM C881  
 Adhesion to sandblasted steel      11 Mpa  
 Tensile strength                              >22 Mpa  
 Compressive strength                      34Mpa  
 Adhesion to concrete                      concrete failure

**Surface preparation**

Remove all dust from holes, any loose material, rust and any oil based residue where the product will be applied. All surfaces must be clean, sound and dry. Pockets must be free of standing water.

**Pot life & Curing**

The product has a 20 minute pot life at an ambient temperature of 25°C. Should the temperature increase, expect an accelerated reaction. In typical applications the product will be touch dry in 3 hours and fully cured in 7 days.

**Application**

*Mixing-* using a small trowel, mix component A with component B for 3 minutes or until uniform colour is achieved

*Application-* pour enough material into the hole to ensure that once the bar is placed the material will push up to the top. Ensure that air entrapment does not take place

**Yield**

$0,8 (D+d)(D-d) HN =$  Litres of grout

1 000 required

where

D = diameter of hole in cm

d = diameter of metal in cm

H = depth of hole in cm

N = number of holes

**ANCHORING METHOD**

Bar Diameter	Hole Diameter	Depth required
8	10	80
10	12	80
12	15	120
16	20	140
20	25	200
25	32	225
32	40	275
40	50	350

**IMPORTANT NOTES**

- Depth of hole should be 10 times diameter of the rod or bar.
- Diameter of hole should be 1.25 to 1.5 times diameter of the rod or bar.
- Do not split kits

**Limitation**

Working temperature between 5-35°C

Ensure that no air entrapment occurs

Maximum service temperature 70°C

**Safety & Handling**

Epoxy resin components may cause skin irritation. The product is low in acute oral toxicity. At room temperature, there is exposure to vapours from the product that may cause allergic skin reaction in humans. Safe handling can best be accomplished by adhering to the following rules:

- Work in well ventilated areas
- Wear PVC gloves, safety glasses and aprons
- Remove any residue with soap and water

- In the event of contact with eyes flush with copious amounts of water. Seek immediate medical attention
- Prior to mixing and curing the product is harm full to the environment

### **Packaging**

The product is a 2 component kit

The following kit sizes are available; 1ℓ, 2ℓ and 5ℓ

### **Shelf life & storage instructions**

12 months when stored in a cool dry place, failure to comply with these recommendations will result in a reduction in shelf life

### **Note**

For further instruction please consult your local representative for a method statement on the product

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