



# EpiMax 570

## Traffic Grade Sealant

### Description

EpiMax 570 Traffic Grade Sealant is a semi-rigid, hybrid epoxy system which is designed to protect the edges of internal industrial slab joints from damage caused by the passage of hard-wheeled vehicles. It combines excellent durability and suitable movement capacity when installed correctly.

Professionally installed, EpiMax 570 eliminates joint spalling and dusting, reduces materials handling equipment operating noise and maintenance costs and provides a professional industrial or distribution centre environment.

Industrial slabs typically have two basic types of joints. These are control (contraction) joints and construction (formed) joints. Control joints are created to reduce or eliminate any haphazard slab cracking by initiating cracking at the base of the joint itself. Construction joints are seen the end of each concrete pour cycle. An industrial concrete slab is not really a single floor since it behaves as a group of smaller floor panels that are separated and connected by joints.

Slab joints widen than originally created because the concrete within the slab shrinks. However, the amount of growth at each joint can be reduced by increasing the number of joints, using a low water-cement ratio mix design or delaying the filling of the joint.

The American Concrete Institute, ACI, has set installation standards for traffic grade semi-rigid industrial floor joint sealants in ACI 302.1R-96 - Guide for Concrete Floor and Slab Construction.

These products are designed for internal applications.

### Advantages

- Can be overcoated
- High pick resistance
- Excellent durability
- Excellent adhesion to concrete
- Good chemical resistance
- Supplied as N22 Cloud Grey; can be tinted with epoxy tints

### Typical properties

- Work time: 30 minutes
- Hardness (Shore A): 85
- Tensile elongation: 50%
- Joint movement capability:  $\pm 5\%$
- Full cure: 5 days at 25°C
- Tensile strength: 15 MPa
- Chemical resistance: resists most acids and alkalies
- Solvent resistance: resists splashes and spills

### Estimating data

8 ltr EpiMax 570 = 53 m of joint (6 mm W x 25 mm D)

### General surface preparation

Surfaces must be clean, sound and free of surface water. Remove laitance, curing compounds, coatings, oil, grease, rust, waxes and other bonding-inhibiting substances.



---

## Joint design

As a guide, joints greater than 10mm in width should avoid the use of a compressible foam backer rod and use clean, dry quartz (EpiMax EA2) as the base.

Compressible backer rod is generally not recommended in industrial floor joints wider than 10mm, as the backer may deflect under load and lead to joint deterioration.

Joint sealant dimension guide for general use:

- Joints up to 12mm wide, the width : depth ratio = 1:1 i.e.  $W = D$
- Joints over 12mm and up to 20 mm wide, the width : depth ratio = 2:1 i.e.  $W = 2 \times D$
- Joints over 20mm and up to 30 mm wide, the width : depth ratio = 1:1 i.e.  $W = D$

Joints should be designed to ensure that movement does not exceed the movement capability of the sealant.

When considering EpiMax 570 the maximum expansion and contraction should not exceed  $\pm 5\%$  of the average joint width.

## Joint preparation

EpiMax 570 must meet directly to clean concrete and not to laitance, dirt, curing compounds, or sealers etc for adequate adhesion.

Chasing the joints with a dustless saw equipped with a diamond/abrasive blade is the best method of cleaning the joints.

Insert a masonry blade into the joint cavity and abrade it against a side wall to check for any remaining saw laitance. EpiMax 570 will not adhere to debris coated joint walls.

Inspect the base of the joint with a screwdriver to check for packed laitance, etc. Install a 5 mm base of clean, dry quartz (EpiMax EA2) to choke-off the base of joint.

Priming is not normally required. However, demanding applications such as frequently wet conditions or high lift heavy duty applications can be primed with EpiMax 225 for added assurance.



## Application

It is recommended to use masking tape where neat joint lines are required. Remove the tape prior to the product skinning over.

Select a slow speed (400 rpm) mechanical mixer and ensure thorough mixing. Add the contents of the Part B container to the Part A container. Mix until a uniform consistency is obtained.

Pour the mixed system with care into the prepared joint and avoid air entrapment. Freshly mixed EpiMax 570 flows well, however some tooling is required.

Note that control joints filled less than full depth may show concrete edge spalling under loads.

Allow EpiMax 570 to reach the solid stage before shaving. "Wet" shaving or filling flush can lead to a lower sealant profile. To confirm flushness after full cure, run a hard-wheeled vehicle over the joint and listen for bounce.

## Packaging

EpiMax 570 is available in 8 litre packs (includes Part A and Part B). They are pre-packed in correct proportions for 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: Part A - Not Classified, Part B - UN 1760