

# Talrakseal® ES

## Two-component epoxy resin based horizontal joint filler for floors



The Construction Alchemists

### Description

Talrakseal® ES is a two-component, pourable, epoxy control joint filler, capable to protect joints in industrial concrete floors subjected to industrial loads and trolley movement. Talrakseal® ES provides an excellent resistance to edge breaking, abrasion and chemical attack. It can also be used for repair of random cracks.

### Features & Benefits

- Resistant to most of the industrial chemicals
- Tough, but resilient to absorb deformations due to wheel loads
- Provides supports to the joint edges to prevent damage
- Bonds well with concrete in the sides of the joint
- Pourable consistency - easy to apply

### Primary Application

- Concrete construction and control joints in industrial floors, warehouse floors
- Crack filler repair for old floors

### Technical Properties

Pot life of mixed material	60 minutes @ 30°C
Specific gravity	1.32
Gel time	40 minutes @ 30°C
Initial hardness	4 hours @ 30°C
Full cure	7 days @ 30°C
Compressive strength	75 MPa
Flexural strength	26 MPa
Tensile strength	5 MPa
Bond strength to concrete	2.5 MPa
Abrasion resistance	3.0 mg/cycle
Shore A Hardness	50 - 75
Movement Accommodation Factor	±10%
Chemical resistance	Resistant to most common mineral acids, alkalis, petroleum-based fuels

### Design Criteria

Joints should be designed such that total movement due to concrete shrinkage and thermal change limited to +10% movement accommodation factor related to the joint width. It is recommended that the saw cut joints to be sealed with Talrakseal® ES are left unfilled till the final stages of construction and initial concrete shrinkage has taken place. To protect the saw cut joints from damage till they are sealed, the grooves may be temporarily filled with polystyrene or similar materials. However, the joints shall be cleared off such materials before sealing with Talrakseal® ES. Generally major concrete shrinkage will take place within the first 28 days. Therefore sealant works should be delayed till then.

### Specification Clause

All the control joints shall be sealed using Talrakseal® ES, a two part, epoxy based sealant. The joints shall be sealed after 28 days of cutting the control joints. The joint sealant shall not be applied over backer rod or sand filled in the joint to reduce volume of the joint. The sealer shall be applied to the full depth of the joint.

### Application Instructions

#### Joint Preparation

The concrete substrate must be fully cured for minimum 28 days before applying the sealant. Joint surfaces must be clean, dry and free from laitance dust, or any other foreign matter. All dry residual dust from joint cutting operations should be completely removed using compressed air blowing. In order to achieve sharp and uniform joint edges, masking tape shall be applied on each side of the joint prior to the commencement of the sealant application, it should be removed immediately after the sealant work is completed.

#### Priming

Priming is not normally required when using Talrakseal® ES in dry, sound, well prepared joints, or joints which have been well reformed. Where optimum adhesion is required or where joints may be totally immersed in water, Talrakepoprime LV may be used.

#### Mixing

The components of Talrakseal® ES are supplied in the pre-batched and prepacked condition. The entire contents of hardener component is emptied into the base container and mixed together thoroughly for three minutes using a slow speed drill (450 rpm) fitted to a mixing paddle till all the components are thoroughly dispersed. The sides of the container should then be scraped down to ensure that any unmixed components do not remain. Mixing should then continue for further two minutes.

## Application

The mixed Talrakseal® ES can be poured directly from the mixing container into the prepared joint. This can better be done by pressing the sides of the container tin to form a pouring lip. The material is poured into the prepared joint to the required level. The mixed material can also be filled into a sealant gun and applied to the joint, if it is convenient to do so. It may be necessary after a few minutes to top up the level of the sealant after it has flowed into all joint irregularities. Finally, strip off the masking tape that may have been used.

## Cleaning

Clean tools soon after use with Talrasol GP. Clean hands with appropriate thinner followed by detergent and hand cleanser.

## Limitations

Talrakseal® ES is not suitable for vertical joints, even if it is applied with a sealant gun.

## Estimating Packaging

Talrakseal® ES is supplied in 4 liter combo pack.  
Talrasol GP is supplied in 5 and 20 liter can.

## Coverage

Guiding formula for the estimation of Talrakseal® ES quantity:

Quantity required ( litres ) =

$$\frac{\text{Joint width (mm)} \times \text{sealant depth (mm)} \times \text{Length of joint (m)}}{1000}$$

**Note:** The above quantity estimation guide does not include wastage factors and dimensional variations of the joints.

## Storage

Talrakseal® ES has shelf life of 12 months when kept in original containers and stored in cool dry conditions.

## Precautions

### Health & Safety Instructions

As some people are sensitive to epoxy resins, gloves and a barrier cream are recommended to be worn when handling these products. If contact with the resin occurs it must be removed before it hardens followed by washing with soap and water do not use solvent. In the event of contact with the eyes, sprinkle clean and cold water liberally into the eyes and seek medical advice.

## Fire

Talrasol GP are flammable. Keep away from sources of ignition. Refrain from smoking in the vicinity of the products. In the event of fire, extinguish with carbon dioxide or foam. Do not use a water jet.

## Flash Point

Talrasol GP : +33°C



**Talrak Construction Chemicals Pvt. Ltd.**

An ISO 9001:2015 Certified Company

### Works:

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## Important note :

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