

## **Contite ® PUE 500/501**

## 2 COMPONENT RIGID POLYURETHANE FOAM FOR CONCRETE SLAB LIFTING SOIL & ROCK CONSOLIDATION

#### **DESCRIPTION**

A new generation phthalates free high performance low viscosity hydrophobic rigid polyurethane injection grout used to increase the load bearing capacity of loose soils, void filling and for concrete slab lifting or underpinning. Contite PUE500 reacts into either a hard foam or very hard plastic. Reaction times may be adjusted by varying the accelerator cure ratio.

### **USES & ADVANTAGES**

Contite PUE500 may be used for soil and rock consolidation, high strength anchoring in wet conditions, filling of large voids, cracks and crevices, pre injection for waterproofing and consolidation in front of TBM and Drill and Blast, filling of fissures, gravel layers, in wet and dry conditions.

Other areas of use are as follows:

- Underpinning houses, levelling of buildings, factory & warehouse floors, parking areas, runways and airport slabs, highways, bridge approach ramps, mining structures, pipelines and other concrete levelling.

## Advantages Include:-

- Phthalates free resins.
- · Solvent free.
- · Fast or slow reactions available.
- Easy mixing 1:1
- Low cost lifting of concrete structures/slabs.
- Can be applied in dry or wet conditions.
- Environmentally friendly.
- Rapid strength gain. Traffic ready in 15 minutes.
- No disruption to working environment.
- Expands 20-30 times.
- · High strength.
- Non shrink.
- Bonds with soil and concrete.
- · Stops repeated water erosion.

#### **PROPERTIES**

For Part A For Part B Yellow Dark brown Appearance: Viscosity: (mPa.s)@25°C 70-120 170-270 1.04-1.06 1.22-1.24 pH Value: 5.5-6.5 7.0-8.0

**Mixed Material** Light brown Appearance: Viscosity: 250-350 Density: 1.13-1.15 6.0 - 7.0

pH Value: Compressive Strength:  $> 40 \text{ N/mm}^2 \text{ at 7 days}$ (with fine sand) ASTM C579

Tensile Strenath: 1.5 MPa

ASTM D638

Young's Strength:

ASTM D638

50 MPa

#### **MIX RATIO**

Contite PUE500 : Contite PU501 = 1:1 by weight

Contite PUE500 : Contite PU501 = 1:1 by volume

### **APPLICATION**

- Contite PUE500 is injected using a 2 component injection pump where the two hoses are connected with a mixing head before attaching to the packers.
- Clean and flush all equipment with Contite PU Purge prior to the injection and between each injection step.
- Check the mixing ratio of the pump by start pumping component A and component B and check the volume in a beaker. To ensure this is 1:1 mix ratio.
- Fill the pump with Contite PUE500 Part A and Part B and first flush the liquid into waste drums until fresh liquid is observed from the hoses.
- Connect the injection head to the packer.
- Open valves for Part A and Part B and start the
- The injection should be continued until the water flow stops, slab is lifted sufficiently or until the premeasured amount of product has been injected in each packer.
- Close the valve and disconnect the packers from the mixing head.
- Continue and repeat the injection steps with the adjacent packer.
- When the injection has finished, clean and rinse all equipment with Contite PU Purge.

## **PACKAGING**

40 kg set; available in Contite PUE500 20 kg & Contite PU501 20 kg in steel packaging. Other packing units are available on request.

## STORAGE CONDITIONS & SHELF LIFE

Store in the shade in dry conditions. Stored in unopened sealed drums, in a dry area, at temperatures of 5°C-35°C, the shelf life is approximately 12 months.

#### **HEALTH & SAFETY**

Avoid skin and eye contact. Wear rubber gloves and safety goggles. Hands should be cleaned with cleaner, followed by soap and water. Avoid breathing of vapours; use with adequate ventilation. Please consult our MSDS for more information (available upon request).



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## **TECHNICAL SERVICE**

The Cormix International Limited Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

## **QUALITY ASSURANCE**

ISO 9001: 2008 verified by TUV Nord.

### **CONTACT DETAILS**

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