

KUT SEGBOND 2550

Epoxy Adhesive for segmental bonding of Match cast and precast concrete segments

BTA-15-1012



DESCRIPTION

KUT SEGBOND 2550 is a specially formulated non – shrink, non-sag, solvent free epoxy resin based Adhesive blended with fine inert fillers. It is supplied as a two component material in pre weighed quantities ready for onsite mixing and use.

KUT SEGBOND 2550 has been specially formulated where the Ambient temperature is varying from 25°C to 50°C

A fast setting grade **KUT SEGBOND 0530** for Ambient temperature at site from 5°C to 30°C is also available.

USES

KUTSEGBOND 2550 is primarily intended as a adhesive for segmental bonding of match cast and precast concrete segments, precast concrete bridge segments to provide a structural and waterproof joints. suitable as a gap filling paste and for grouting of starter bars, holding down bolts, etc. where thixotropic consistency is required.

ADVANTAGES

- Non sag, easy to apply, recommended for vertical application
- High strength, excellent adhesion to concrete, steel and most construction materials.
- Recommended for bonding and sealing segmental precast concrete elements.
- Moisture tolerant, can be applied to damp surfaces, free from standing water.
- Factory quality controlled pre – weighed quantities which reduce site errors.
- Function as a lubricant during the joining of the match cast segments, function as a filler to accurately match the surface of the segments and will provide a durable watertight bond at the joint.
- Thermosetting 100 % reactive compositions that do not contain volatile solvents, thinners or any non-reactive organic ingredient except pigment required for coloring.

TYPICAL PROPERTIES

- **Colour:** Grey
- **Mixed material:** 1.72 ± 0.1
- **Consistency:** Soft, Non-sag paste.
- **Pot life (ASTM D 2471)**
 - @ 25°C : 75 Minutes
 - @ 30°C : 60 Minutes
 - @ 45°C : 45 Minutes
 - @ 50°C ; 25 Minutes
- **Water absorption (ASTM D 570) :** 0.5 %
- **Heat Deflection Temperature**
14 days (ASTM D 648) : 50°C
- **Tensile Bending:** 100 % Concrete failure
- **Contact strength:**
ASTM C 881 spec
ASTM C 882 test method: 7.1 Mpa @ 3 days (Moist-cure)
- **Compressive strength :**
ASTM C 579 test method : 76 Mpa @ 7days
ASTM C 881 spec
ASTM D 695 test method : 14.1 Mpa@24 hr : 46 Mpa @ 7 days
- **Open Time:** 45 min to 8 hours depending on temperature and humidity.
- **Full Cure :** 7 days
- **Minimum Application Temperature :** 5°C.
- **Substrate Temperature :** +25°C min /+50°C max
- **Ambient Temperature :** +25°C min /+50°C max, can be used from 10°C up to 50°C ,at lower temperature the mating surface should be held in place for longer time.
- **Dew Point:** Beware of condensation, Substrate temperature during application must be at least 3°C above dew point.

The cured surface of **KUT SEGBOND 2550** is resistant to most aqueous systems, sewage, fresh water, sea water, mild alkalis, mineral oils, vegetable oils, fats, ammonia and formaldehyde.



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INSTRUCTIONS FOR USE

Concrete surfaces free from water, grease, oil, contamination, dust laitence and loose concrete must be removed by scabbling or light bush hammer. Metal surfaces should be fully degreased followed by grit blasting to **BS – 4232: Second Quality** or **SA2.5 (SIS 05 5900)**. All reinforced bars should be coated with a corrosion resistant primer at the interface level. All free – standing water should be removed and the surface should be dabbed with some absorbent material.

Mixing: **KUT SEGBOND 2550** is supplied in pre measured quantities with a total volume of 8 litres. Add the entire contents of the hardener to the base and mix thoroughly with a Mixing paddle attached to a heavy duty electric drill operating at not more than 450 rpm to avoid entrapping air. Mixing should be continued until an even grey colour. Mixing time should be 3 to 5 minutes. Ensure that the side and bottom of the container are scraped down thoroughly.

Application: After mixing apply to the previously prepared substrate using gloved hand and trowel, at a thickness of 2 mm one side and 1mm on the other mating surface.

The mixed epoxy should be used applied immediately after mixing and application must be completed within its specified pot life, Mating surfaces must be brought together and temporary stressing applied within the open time of the adhesive.

***Note:** The mixed **KUT SEGBOND 2550** will heat up and cure very rapidly if held for any length of time in the mixing container, particularly at the upper application temperature range of the epoxy.

PACKAGING

KUT SEGBOND 2550 is available in 8 Ltrs pack.

COVERAGE

KUT SEGBOND 2550 is recommended at a spread rate of 1m²/Ltr @ 1 mm thickness.

PERFORMANCE STANDARDS

ASTM C 881 – Type II, V & VI. Grade 3 – Class B, C, E & F.

Bond Strength in accordance with **ASTM C – 882.**

Compressive strength in accordance with **ASTM C 579, ASTM D 695.**

Pot life in Accordance with **ASTM D 2471.**

Open time , sag flow & Shear strength in accordance with **ANSI 118.4**

PRECAUTIONS

Cleaning: Spillages should be absorbed with sand or earth etc. and disposed of in accordance with local regulations. Clean tools and equipment with **KUT SOLVENT EP** immediately after use.

Storage: Store in dry conditions upto 20°C. Shelf life is 12 months.

HEALTH & SAFETY

KUT SEGBOND 2550 should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalation with vapours. Some people are sensitive to epoxy resins, therefore protective goggles and barrier creams should be used. Ensure adequate ventilation and if working in enclosed areas, suitable breathing apparatus must be used. If this material comes in contact with skin it must be removed before it gets dried by washing with soap and water. If contamination occurs with the above primer, wash well with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately. Do not induce vomiting.

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Distributor