

# Toughbond - 301029/301074 Technical Data Sheet

#### **Technical Information**

Toughbond is a high viscosity fast curing two component transparent epoxy adhesive which has excellent adhesion to metal, ceramic tiles, concrete, wood and most hard plastics. It can be used for the repair of metal castings, ceramic ornaments and metal or wood furniture, for the fixing of fittings to brick, wood or plaster, for fixing stone slabs and copings and for modelling and test rig manufacture.

Toughbond is supplied in two tubes: one containing the Resin, the other the Hardening component. Extrude a portion from each tube, on to a clean surface, to form two strips of equal length and mix by hand.

After mixing the Toughbond begins to set in 3-5 minutes at  $20^{\circ}$ C. This gives a handling time of just 30 minutes and full cure is achieved within 24 hours.

### Directions for use

- 1. In order to achieve optimum adhesion, surfaces should be cleaned free of grease, dirt paint etc. Scuffing or sanding the surface prior to cleaning helps to ensure a good bond.
- 2. Remove the cap from Resin tube and extrude the desired quantity, as a continuous strip, on to a clean disposable surface. Replace the Resin cap
- 3. Remove the cap from the Hardener tube and extrude a continuous strip of product equal to that squeezed-out for the resin. Replace the Hardener cap.
- 4. Mix the two components for about 30 seconds until an even mix is achieved.
- 5. Apply the adhesive to one surface and press or clamp the two surfaces together. Support the joint if necessary.
- 6. Leave undisturbed until the hardening time has elapsed.

### Technical Data

Working time  $3 \text{ min. at } 20^{\circ}\text{C}$ Initial set  $3-5 \text{ min at } 20^{\circ}\text{C}$ Hardening time  $30 \text{ minutes at } 20^{\circ}\text{C}$ 

Cure time 24 hours
Colour Pale yellow
Resin density 1.15 g/cm3
Hardener density 1.08 g/cm3
Mixed viscosity 100 Pa.s.
Mixing ratio 1:1 by volume

Bond line thickness <2mm
Application temperature 5 to -35°C
Service temperature -20°C to 60°C

PAGE 1 OF 2







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Lap shear strength	Age	<u>Strength</u>
(Din 53283) @ 250C	1 Hour 4 Hours 24 Hours	$\frac{10\text{N/mm}^2}{14\text{N/mm}^2}$ $\frac{20\text{N/mm}^2}{2}$

The above figures are typical for Toughbond

## **Storage**

Toughbond should be stored out of direct sunlight in dry frost free conditions of temperatures between 15° and 25°C. Under such conditions shelf life will be 24 months from the date of manufacture.

## **Packaging**

Toughbond is supplied in two separate tubes.

## Health and Safety

Toughbond is currently classified as an irritant. Wear suitable eye protection and rubber or plastic coated gloves..

For further health and safety information please refer to the relevant Safety Data Sheet.

### Important Note

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it, that the actual conditions of use are suitable and that in the light of continued research and development the information relating to each product has not been superseded.

ISSUE No: 2 ISSUE DATE: MARCH 2011 ISSUED BY: M.JOYCE ITEM REF: 301029/301074





