

## Glassbond LED Capping Adhesive L829

### Characteristics

- Ultimate heat resistance
- Thixotropic, shear-thinning properties
- One-component adhesive, no need for hardeners
- Cures at room temperature
- Invisible bond line
- Moderate working time

### Recommended For

LED components

### Description

Glassbond LED Capping Adhesive L829 is a moisture-activated, one-component adhesive developed specifically for LED bulb manufacture. This grade demonstrates a flexible nature whilst forming a hand-tight seal in seconds.

#### **Physical properties**

Appearance	Clear, thixotropic
Specific gravity (at 25°C)	1.05 – 1.10g/cm <sup>3</sup>
Viscosity (at 25°C, Brookfield RV)	4,000 – 6,000cP
Flash point	>81°C
Softening point	130°C
Cure time (at 25°C)	24 hours

#### **Bonding speed**

#### **Time (seconds)**

Aluminium to glass	15 to 25
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Bonding speed is defined as the time taken to develop a strength of 0.1N/mm<sup>2</sup> at 22°C and 50% relative humidity in accordance with ISO 4587.

**Physical properties were determined on specimens prepared under laboratory conditions. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation. Data should not be used for specification purposes.**

### Application/Instructions

**PREPARATION** – Bring the adhesive to room temperature prior to use and ensure the surfaces to be bonded are clean and free from dirt or grease. Cleaning can be carried out with standard grade solvents such as IMS or acetone. This adhesive uses residual surface moisture to cure so there is no requirement to dry the surfaces prior to use. The substrate that doesn't have adhesive applied to it can be prepared by carefully exhaling on it to create a humid environment.

**APPLICATION** - Use as thin a bond line as possible while ensuring complete coverage of the target area. Apply Glassbond LED Capping Adhesive L829 to one substrate and hold the parts together firmly by hand. If the substrates are able to be clamped together the tensile/torque strength can be improved. The thinner the bond line, the stronger the bond. Due to its thixotropic nature this adhesive won't run and should demonstrate a good ability to stay in place when applying. Avoid contact with natural fibres such as cotton and wool.

## **Setting/Curing**

When bonding glass to metal Glassbond LED Capping Adhesive L829 will form a hand-tight grip within seconds however other substrates may vary in bonding speed. Suitable pressure by hand should be applied when bonding. Full strength will be achieved after 24 hours at room temperature.

## **Recommended quantity of adhesive to be used (by cap type)** – for guidance only

E14	0.10g
E27	0.20g
T5	0.12g
T8	0.19g
T10	0.24g
T12	0.28g

## **Cleaning**

Excess adhesive should be left to set before scraping or abrading away with an emery board.

## **Packaging**

This material is supplied in various types and sizes of containers. Please contact Glassbond's sales department for further details ([sales@glassbond.co.uk](mailto:sales@glassbond.co.uk)).

## **Shelf Life**

Glassbond LED Capping Adhesive L829 has a shelf life of six (6) months when stored in unopened, tightly sealed containers in a dry location at 2°C to 10°C. Maximum storage temperature is 25°C. HDPE containers do not offer a complete barrier, store away from other chemicals and sources of humidity. Strong light exposure can discolour product. If there is doubt as to the quality of the material, consult Glassbond.

## **Caution**

Consult the Material Safety Data Sheets and container label caution statements for any hazards in handling this material.

## **Warranty**

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. WE GIVE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHERWISE, EXPRESS OR IMPLIED, OTHER THAN AS EXPRESSLY SET FORTH HEREIN. Users shall determine the suitability of the product for intended application before using.