Technical Datasheet

Glassbond LED Capping Adhesive L904

Characteristics

- Cures with UV light in seconds
- Creates a tough plastic film
- High tensile strength
- Non-flammable
- One-component adhesive, no need for hardeners
- Cures at room temperature
- Invisible bond line

Recommended For

LED components

Description

Glassbond LED Capping Adhesive L904 is a UV light-cured, one-component adhesive developed specifically for LED bulb manufacture. This grade demonstrates elongated working time until a final cure is required.

Physical properties	
Appearance	Clear to pale yellow liquid
Specific gravity (at 25°C)	1.04g/cm^3
Viscosity (at 25°C, S4 @ 20rpm)	1,100 – 1,400cP
Flash point	>81°C
Full cure time (at 25°C)	24 hours

Cured properties	
Appearance	Clear, colourless
Solubility	DMF, acetone, acetonitrile
Hardness (Rockwell)	M58

Bonding speed	**Time (seconds)**
10 mW/cm^2	<3

Bonding speed is defined as the time taken to develop a strength of 0.1N/mm^2 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 UV light to cure so a suitable light source should be acquired to initiate cure.

APPLICATION - Ensure one of the substrates that is to be adhered is transparent and aim for complete coverage of the target area. Apply Glassbond LED Capping Adhesive L904 to one substrate and hold the parts together firmly by hand. Keep both substrates steady and expose as much of the bond line as possible to UV light. If the substrates are able to be clamped together the tensile/torque strength can be improved.

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St Helens Chamber

Setting/Curing

When bonding glass to metal Glassbond LED Capping Adhesive L904 displays an elongated working time and will not form a hand-tight grip until it is exposed to UV light. Suitable pressure by hand/clamp should be applied when bonding. Full strength will be achieved after sufficient UV light exposure and 24 hours at room temperature. For optimum results we recommend a high intensity UV-A light source.

Packaging

This material is supplied in various types and sizes of containers. Please contact Glassbond for further details (sales@glassbond.co.uk).

Shelf Life

Glassbond LED Capping Adhesive L904 has a shelf life of six (6) months when stored in unopened, tightly sealed containers in a dark and 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 and adversely affect the 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.