

Technical Data Sheet

LT870 – High Strength Threadlocker

Characteristics

- Medium viscosity liquid
- Ease of application
- High strength
- One-component
- Bond strength can exceed that of substrate
- Cure in joint in the absence of air

Recommended For

High vibration/heavy duty applications

Description

Glassbond Anaerobic Adhesive LT870 is a green, high strength, threadlocker. When cured, typically exhibits a higher torque over breakaway strength. Formulated for the permanent locking of threaded fasteners in heavy duty applications. Perfect for locking nuts or studs into pump and motor housings. Cures in the absence of air, between close fitting parts where metal ions are present. Prevents loosening caused by vibration, shock and thermal expansion. Also seals against leaks and reduces risk of corrosion.

Physical properties

Appearance	Green liquid
Viscosity	500 – 900 cP
Service Temperature	-54 to 150°C

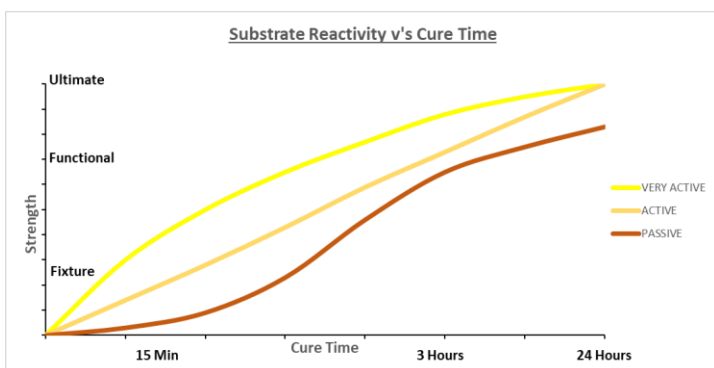
Bonding Speed

Fixture Time	<10 min
Full Cure	24hr

Time

Other properties

Breakaway torque	26 - 50Nm
Prevail torque	>15Nm



Substrate selection is key to performance (graph is for guidance only).

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 – For optimum performance ensure the surfaces to be bonded are clean and free from dirt or grease. Where washing systems are used to clean the surfaces before bonding, it is important to check the compatibility of the washing solution with the adhesive. If the material to be bonded is an inactive metal, consider using activator prior to use.

APPLICATION – Shake the product thoroughly prior to use. Apply several drops to the surfaces to the nut and bolt. Assemble and tighten as necessary. Due to its thixotropic nature this adhesive won't run and should demonstrate a good ability to stay in place when applying. To prevent clogging of the nozzle, do not let the tip touch the metal surface during application.

Setting/Curing

There may be a difference in fixture speed and strength dependent upon the substrate. For example, full strength will be achieved more rapidly with materials such as mild steel and brass when compared to passive materials such as stainless steel or zinc dichromate. Fixture times will also be longer at lower temperatures. It is possible to accelerate the fixture time by heating the assembled parts or by using an activator. **NB** the use of an activator may reduce bond strength (possibly by 30%). Overall maximum strength may take up to 24 hours to achieve. See table below for comparative substrate reactivity.

CLASSIFICATION	SUBSTRATE
VERY ACTIVE	Brass, Copper
ACTIVE	Mild Steel, Bronze, Iron
PASSIVE	High Alloy Steel, Aluminium, Stainless Steel, Oxide Films, Nickel, Silver, Zinc, Gold, Chromate Films, Plastics, Ceramics, Anodic Coatings

Fixture speed is also affected by bond gap size. Typically, this is determined by fastener size and thread type. A larger gap between threads/parts can result in longer fixture time.

Cleaning

To remove cured product, use a combination of solvent and abrasion, such as a wire brush.

Packaging

This material is supplied in 10ml, 50ml and 250ml HDPE packaging. Please contact Glassbond's sales department for further details (sales@glassbond.co.uk).

Shelf Life

Glassbond LT870 has a shelf life of 12 months when stored in unopened, tightly sealed containers in cool conditions, away from direct sunlight. Ideal storage temperature is between 8°C and 21°C. 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. Not to be used in oxygen rich systems or in the presence of other strong oxidising materials.

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.