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Glassbond

by

Technical Data Sheet

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<u>LP877 – General Purpose Fast Cure</u> <u>Pipe Sealant</u>

Characteristics

Recommended For

Threaded metal Pipes and Fittings

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

Description

Glassbond Anaerobic Adhesive LP877 is a yellow, general purpose, fast curing pipe sealant. Cures in the absence of air, between close fitting parts where metal ions are present. Prevents leaking and loosening caused by vibration and thermal expansion.

Physical properties		
Appearance	Yellow liquid	
Viscosity	16,000 – 33,000 cP	
Service Temperature	-54 to 150°C	
Bonding speed	Time (minutes)	
(based on substrate reactivity)		
Very Active	10	
Active	20	
Passive	120	
Other properties		
Breakaway torque	33Nm	
Shear strength	>5N/mm ²	
Compressive strength	10,000 psi	
Chemical resistance to oils and solvents	Classified as exceptional	
(eg motor oil, leaded petroleum, acetone,		
Brake fluid, ethanol, propanol, water)		
Substrate Reactivity v's Cure Time		
ر Ultimate		
	Substrate coloction is knute performance (graph is for
- Functional	Substrate selection is key to performance (guidance only).	graph is for
Strength	ACTIVE PASSIVE	
⁵⁵ Fixture		
15 Min Cure Time 3 Hours	24 Hours	

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.

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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 be sealed. 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	SIVE High Alloy Steel, Aluminium, Stainless Steel, Oxide Films, Nickel, Silver, Zinc, Gold, Chromat Films, Plastics, Ceramics, Anodic Coatings	

Fixture speed is also affected by bond gap size. A larger gap between threads/parts can result in longer fixture time.

<u>Cleaning</u>

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

Packaging

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

Shelf Life

Glassbond LP877 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.