Technical Information 932

Loctite Product 932

Scope

Loctite product 932 is designed as a low strength fast curing threadlocking product that provides easily disassembly and/or readjustment.

Typical applications

- Precision screws for electronic industry
- Nuts
- Set screws
- Fasteners made of soft metals (aluminium, brass, zamac)
- Adjustment screws

Product benefits

- Allows easy disassembly or readjustment with low breakaway strength.
- Prevents breakage of fasteners made of soft metals during disassembly.
- Locks threads to prevent vibration loosening.
- Cures fast and reliably on most industrial surfaces.
- Seals threads and prevents leakage or corrosion of the connections.
- Prevents seizing up of threaded parts.
- Eliminates jam nuts on adjusting parts.
- Allows repeated adjustment while still maintaining adequate locking strength.

Performance Properties of Cured 932 (on steel surfaces)

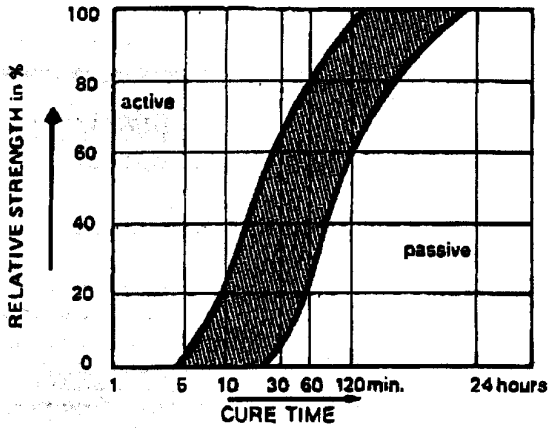
Strength:	*Test Method:*	*Typical Values:*
Breakaway strength τ_{B1}	MIL-S-46163	·7-1·8 N/mm² (100-250 lb/in²)
Prevailing strength τ_p	MIL-S-22473	·2-1 N/mm² (30-150 lb/in²)

Physical Properties of liquid 932 (typical values):	
Resin	di-methacrylate ester
Viscosity at 25°C	125 m.Pa.s.
Specific gravity	1.05
Colour	brown
Flashpoint (COC)	> 100°C
Shelflife	1 year minimum when stored between +5°C and +28°C
Toxicity	Low (see caution)
Corrosivity (MIL-S-22473-D)	None (measured on common industrial metal surfaces.
Max. gapfilling	0.15 mm Diametral (.006")

Note: All test data was obtained on a variety of M10 size nuts and bolts having different industrial standard finishes.

Speed of Cure

Loctite product 932 cures fast and reliably on most industrial metals at room temperature. At temperatures below 15°C or if faster cure is required we advise the use of Activator T or N. However, the use of activators may reduce the ultimate strength by 15-20%.



Temperature resistance

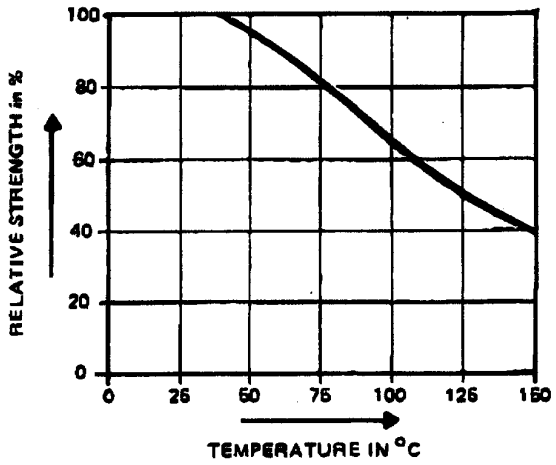
Recommended operating temperature range is: -55°C to +150°C.

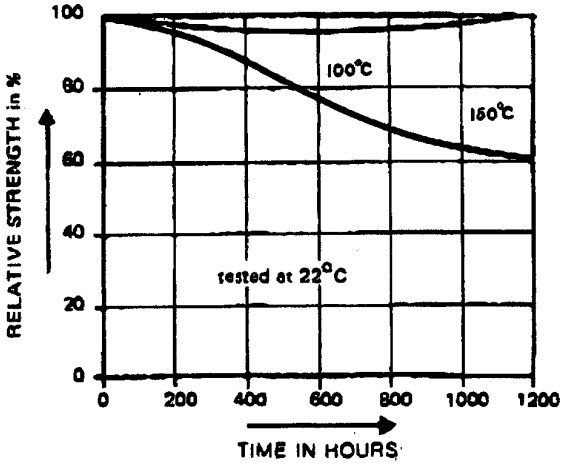
Heat ageing

The relative strength after continuous operation at elevated temperatures is indicated in the graph.

Hot strength

The graph shows the relative strength of fully cured cylindrical joints at elevated temperatures.





Solvent resistance

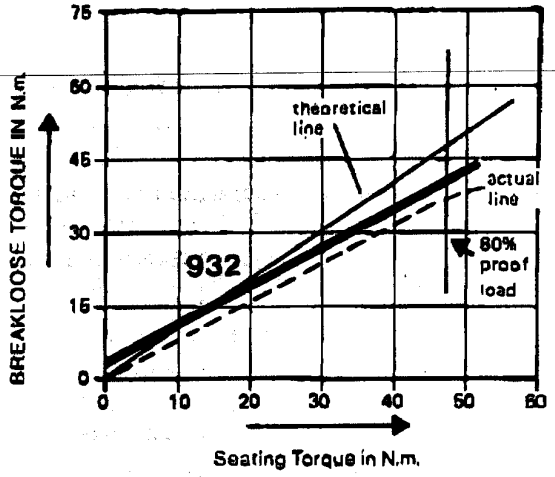
Loctite Product 932 has sufficient solvent resistance for most locking purposes. In applications involving immersion in water for water/glycol mixtures a stronger grade would be recommended.

Additional locking strength

The 'theoretical line' shown in the graph represents an 'ideal' system in which breakloose torque is equal to the seating torque.

The 'actual line' shows breakloose torque for a typical untreated fastener. The value is normally 15-30% less than the seating torque since no increase in tension is being applied to the bolt.

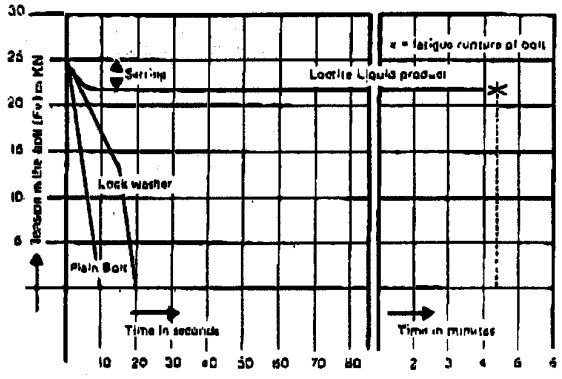
The graph shows that Loctite 932 provides additional locking strength when compared to the actual breakloose torque.



Resistant to vibration loosening

The most frequent cause of bolt failure is loosening of the assembly by tranverse dynamic loads (shocks or vibrations).

Loctite products completely fill up the space within a threaded joint and so prevent relative motion in the assembly eliminating vibration loosening.



Performance measured on a transverse shock and vibration test machine.

GENERAL INFORMATION

Liquid Loctite anaerobic products are single component materials that harden to a polymeric solid in the absence of air or oxygen.

Contact with active metal parts or elevated temperatures accelerates the cure speed. If cleaning is necessary, Loctite Superclean Safety Solvent in convenient spray can is recommended.

Use of Plastics

Loctite anaerobic products are non-corrosive and can be used with most materials. Certain plastics may, however, be adversely affected, e.g. some acrylics, styrene or polycarbonate. Careful testing should be carried out before use.

Storage

Store material in original containers between +5°C and +28°C for maximum shelf life. When stored under these conditions, a minimum of one year shelf life may be expected.

Materials removed from containers should not be returned to original containers due to possible contamination.

Application methods

For easy dispensing and exact metering, semi-automatic and automatic equipment is available. See Applicator Brochure or contact your Loctite Distributor for information

Packaging

Loctite product 932 is available in 50 ml 250 ml and 1 litre containers.

CAUTION

Loctite anaerobic adhesives/sealants are not common allergenic (sensitizing) materials. However, when used under conditions in which skin is continuously bruised or microlacerated, sensitisation has been known to occur. Contact with skin in such conditions should be avoided.

Remove adhesive from the skin with soap and water, In case of eye contact flush with water and seek medical attention. To avoid contact use the applicator nozzle provided.

Automatic applicators are available.

Note

No liability is accepted for any injury, loss or damage arising directly or indirectly from the use of the company's products or from the use of information given in our publications, which is intended to serve as a guide only. Customers should satisfy themselves by appropriate trials that the products are suitable for their intended use.

For further information please contact your Loctite Sales Engineer or the Applications Engineering Department of Loctite UK.

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