

LOCTITE[®] 5331™

June 2005

PRODUCT DESCRIPTION

LOCTITE[®] 5331[™] provides the following product characteristics:

Technology	Silicone
Chemical Type	Acetoxy silicone
Appearance (uncured)	White paste
Components	One component - requires no mixing
Viscosity	Medium
Cure	Humidity
Application	Thread sealing
Strength	Low

LOCTITE[®] 5331[™] is recommended for use on plastic pipe threaded fittings carrying hot or cold water. This product cures at ambient temperatures under the influence of atmospheric moisture to form a low strength flexible seal against hot and cold water.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.1
Flash Point - See MSDS
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):
Spindle 7, speed 10 rpm 50,000

Instant Sealing Capability

The cure speed of this product is independent of substrates but requires atmospheric humidity 40% minimum to develop full sealing capability (0.3 Mpa) within 12 hours. Instant seal capability is 0.05 Mpa water pressure as measured on 25.4 mm fittings. Low temperatures do not reduce the effectiveness of this sealant unless the atmospheric moisture is also low.

TYPICAL CURING PERFORMANCE

Open Time

Open Time @ 25°C, minutes 5

TYPICAL PERFORMANCE OF CURED MATERIAL Adhesive Properties

After 72 hours @ 22 °C		
Breakaway Torque, ISO 10964:		
M10 steel nuts and bolts	N·m (lb.in.)	1.5 (13.3)
Prevail Torque, ISO 10964:		
M10 steel nuts and bolts	N·m (lb.in.)	0.5 (4.42)
Breakloose Torque, DIN 54454:		
M10 steel nuts and bolts	N·m (lb.in.)	4.5 (39.8)
Max. Prevail Torque, DIN 54454:		
M10 steel nuts and bolts	N·m (lb.in.)	1.0 (8.85)

TYPICAL ENVIRONMENTAL RESISTANCE

The low strength of this sealant is maintained at temperatures up to 150 °C

Sealing capability is maintained up to 0.03 Mpa in water @ 90 $^{\circ}$ C. Tests on steel fittings using water/glycol maintained seals cycling 20 to 90 $^{\circ}$ C for 12 months without leaking.

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Directions for use

- Apply the product to the threaded parts (these may be to, "as received" parts or parts cleaned with a damp cloth or paper towel).
- Product should be applied to both male and female threads and then worked into the threads to ensure good wetting.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion

herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. [®] denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 1.0