

# LOCTITE<sup>®</sup> 5331™

September 2012

## PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> 5331™ provides the following product characteristics:

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

LOCTITE<sup>®</sup> 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.

## NSF International

**Registered to NSF Category P1** for use as a sealant where there is no possibility of food contact in and around food processing areas. **Note:** This is a regional approval. Please contact your local Technical Service Center for more information and clarification.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.1

Flash Point - See SDS

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	1.5
	(lb.in.)	(13.3)

Prevail Torque, ISO 10964:

M10 steel nuts and bolts	N·m	0.5
	(lb.in.)	(4.42)

Breakloose Torque, ISO 10964, Pre-torqued to 5 N·m:

M10 steel nuts and bolts	N·m	4.5
	(lb.in.)	(39.8)

Max. Prevail Torque, ISO 10964, Pre-torqued to 5 N·m:

M10 steel nuts and bolts	N·m	1.0
	(lb.in.)	(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 0.3 MPa in water @ 90 °C. Tests on steel fittings using water/glycol maintained seals cycling 20 to 90 °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 Safety Data Sheet (SDS).**

## Directions for use:

1. Apply the product to the threaded parts (these may be to, "as received" parts or parts cleaned with a damp cloth or paper towel).
2. Product should be applied to both male and female threads and then worked into the threads to ensure good wetting.
3. For potable water systems, allow product to cure for 96 hours at 20 to 23°C prior to use.

**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:**

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Reference 1.6