



LOCTITE[®] 596[™]

November 2008

PRODUCT DESCRIPTION

LOCTITE[®] 596[™] provides the following product characteristics:

Technology	Silicone
Chemical Type	Acetoxy silicone
Appearance (uncured)	Red smooth flowable paste
Components	One component - requires no mixing
Cure	Room temperature vulcanizing (RTV)
Application	Gasketing & sealing
Flexibility	Enhances load bearing & shock absorbing characteristics of the bond area.
Specific Benefit	Easy application, Flowable, Self-leveling and Heat resistant

LOCTITE[®] 596[™] cures on exposure to moisture in the air to form a tough, flexible, waterproof, oil-resistant silicone rubber bond. This product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. This product is also used as a sealant and adhesive for assembly and repair of industrial furnaces, ovens, boilers, exhaust stacks, high temperature ducting, and heating elements in electrical appliances. This product is typically used in applications with an operating range of -50 °C to +250 °C and can intermittently reach temperatures up to +275 °C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.3
Viscosity @ 23°C, mPa·s (cP)	73,500
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

Skin Over Time

Skin over time is the time the surface of the adhesive forms a skin upon exposure to atmospheric moisture at 25 ± 2 °C, 50 ± 5% RH.

Skin Over Time, minutes	8
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Tack Free Time

Tack Free Time is the time required to achieve a tack free surface

Tack Free Time, minutes	20
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TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 23 °C / 50% RH, on 2 mm thick sheet:

Physical Properties:

Shore Hardness, ISO 868, Durometer A	34
Elongation, at break, ISO 37, %	290
Tensile Strength, ISO 37	N/mm ² 3.2 (psi) (460)

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).

NOTE: *The curing process can cause corrosion to some surfaces.*

Directions for use:

1. For best performance bond surfaces should be clean and free from grease.
2. Moisture curing begins immediately after the product is exposed to the atmosphere, therefore parts to be assembled should be mated within a few minutes after the product is dispensed.
3. The bond should be allowed to cure (e.g. seven days), before subjecting to heavy service loads.
4. Excess material can be easily wiped away with non-polar solvents.

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.

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 μm / 25.4 = mil
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

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.

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