

# LOCTITE<sup>®</sup> Superflex<sup>®</sup> Blue **RTV Silicone**

November 2004

# **PRODUCT DESCRIPTION**

LOCTITE<sup>®</sup> Superflex<sup>®</sup> Blue RTV Silicone provides the following product characteristics:

Technology	Silicone
Chemical Type	Acetoxy silicone
Appearance (uncured)	Blue paste <sup>LMS</sup>
Components	One component - requires no mixing
Cure	Room temperature vulcanizing (RTV)
Application	Gasketing
Flexibility	Enhances load bearing & shock absorbing characteristics of the bond area.
Specific Application	Gasket replacement or Gasket dressing
Specific Benefit	Adheres to a wide range of substrates

LOCTITE<sup>®</sup> Superflex<sup>®</sup> Blue RTV Silicone cures on exposure to moisture in the air to form a tough, flexible, silicone rubber gasket. This product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. The original "Blue" gasketing product, refined and oxygen sensor safe. Typical applications include valve covers, timing gear covers, differential covers, oil pans, transmission pans, water pumps, and thermostat housings. This product is typically used in applications with an operating range of -54 °C to 204 °C.

# TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.04
Flash Point - See MSDS	
Odor	Acetic Acid
Extrusion Rate, g/min:	
Pressure 0.62 MPa, temperature 25 °C:	
1/8" Nozzle	≥250 <sup>LMS</sup>
Flow, ISO 7390, mm	≤7.5 <sup>LMS</sup>

## TYPICAL CURING PERFORMANCE

#### Surface Cure

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

Tack Free Time, minutes:	
Cured @ 25 °C / 50±5% RH	≤60 <sup>LMS</sup>

### TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 25 °C / 50% RH:	
Physical Properties:	
Shore Hardness, ISO 868, Durometer A	>25

## TYPICAL ENVIRONMENTAL RESISTANCE

The product retains effective properties in contact with automotive fluids, such as motor oil, transmission fluids, alcohol and antifreeze solutions.

NOTE: Not recommended for parts in contact with gasoline.

## **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.

NOTE: LOCTITE<sup>®</sup> Superflex<sup>®</sup> Blue RTV Silicone is not recommended for use as a cylinder head gasket or head gasket sealant.

#### Loctite Material Specification<sup>LMS</sup>

LMS dated September 1, 1995. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

#### 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

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm x 25.4 = V/mil mm / 25.4 = inches N x 0.225 = lb N/mm x 5.71 = lb/in N/mm<sup>2</sup> 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.

# Trademark usage

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

Reference 1