

LOCTITE[®] Superflex[®] Clear RTV Silicone

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PRODUCT DESCRIPTION

LOCTITE[®] Superflex[®] Clear RTV Silicone provides the following product characteristics:

Technology	Silicone
Chemical Type	Acetoxy silicone
Appearance (uncured)	Clear ^{LMS}
Components	One component - requires no mixing
Viscosity	Thixotropic paste
Cure	Room temperature vulcanizing (RTV)
Odor	Acetic Acid
Application	Sealing
Specific Benefit	<ul style="list-style-type: none"> • Non-slumping • Superior adhesion and flexibility • Seals out moisture and contaminants • Fills large cracks and seams • Non-flammable • Non-toxic

LOCTITE[®] Superflex[®] Clear RTV Silicone is a single component, room temperature vulcanizing compound designed to provide an excellent adhesive sealant for mechanical assemblies. This material cures on exposure to moisture in the air to form a tough, flexible, silicone rubber seal. This product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. Designed for superior bonding and sealing properties to most surfaces (not recommended for concrete). Formulated to withstand extreme temperature cycling, UV light and ozone. Typical applications include electrical insulation, protection of leads from mechanical shock, trim bonding, and sealing of ductwork, vents, flues, doors, and windows.

NSF International

Certified to ANSI/NSF Standard 51 for use with plastic materials and components used in food equipment not exceeding 204°C. **Note:** This is a regional approval. Please contact your local Technical Service Center for more information and clarification.

UL Classification

Classified by Underwriters Laboratories Inc.[®] E257711 - Plastics & Components. Please visit the UL website for additional information. **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	1.01
Extrusion Rate, g/min	350 to 750 ^{LMS}
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

LOCTITE[®] Superflex[®] Clear RTV Silicone cures on exposure to moisture in the air. The product dries tack free in 45 minutes and fully cures in 24 hours. Cure times will vary with temperature, humidity and gap.

Tack Free Time / Surface Cure

Tack Free Time, minutes	≤45 ^{LMS}
Full cure time, hours	24

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 1 week @ RT

Physical Properties:

Tensile Strength, ISO 37	N/mm ² (psi)	≥0.8 ^{LMS} (≥120)
Elongation, ISO 37, %		≥275 ^{LMS}
Shore Hardness, ISO 868, Durometer A		≥14 ^{LMS}

TYPICAL ENVIRONMENTAL RESISTANCE

Silicones provide excellent environmental resistance due to their unique chemical structure and the inherent properties of the materials.

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).

Loctite Material Specification^{LMS}

LMS dated July 6, 2005. 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.

Directions for use:

1. Clean and dry surfaces. Remove all oil and grease.
2. Apply product to surface. For bonding applications, apply to one surface only and join surfaces immediately. When using pressurized cans and cartridges, apply silicone by pushing the product in the direction of use (Forward) into the surface.
3. Wipe away excess material immediately.

Clean-up

1. Allow excess material to extend beyond the extension nozzle or aerosol tip to cure, sealing and protecting the remaining product from moisture. For reuse, simply remove the cured product from the tip.
2. Remove uncured product from parts and hand-tools with a dry cloth. If skinned over, break film with a dry cloth to remove as much as possible.
3. Clean hands with a dry cloth or hand cleaner.

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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Note

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Reference 0.1