

# LOCTITE<sup>®</sup> SI 5011CL

Known as LOCTITE<sup>®</sup> Superflex<sup>®</sup> Non-Corrosive RTV Silicone  
January 2015

## PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> SI 5011CL provides the following product characteristics:

<b>Technology</b>	Silicone
Chemical Type	Oxime silicone
Appearance (uncured)	Clear paste
Components	One component - requires no mixing
<b>Cure</b>	Room temperature vulcanizing (RTV)
<b>Application</b>	Sealing and Bonding
Flexibility	Enhances load bearing & shock absorbing characteristics of the bond area.
Specific Benefit	Non-corrosive
Specific Application	Sealing and bonding of electrical/electronic components

LOCTITE<sup>®</sup> SI 5011CL offers resistance to water, steam, chemicals, and UV ozone exposure. Also adheres to a wide range of substrates (glass, rubber, wood, ceramics, and painted surfaces).

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.04  
Flash Point - See SDS

## 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 ≤30<sup>LMS</sup>

Skin Over Time, minutes:  
Cured @ 25 °C / 50±5 % RH 15 to 20

## TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 25 °C / 50±5 % RH

### Physical Properties:

Shore Hardness, ISO 868, Durometer A ≥20<sup>LMS</sup>  
Elongation, ISO 37, % ≥300<sup>LMS</sup>  
Tensile Strength, ISO 37 N/mm<sup>2</sup> ≥1.2<sup>LMS</sup>  
(psi) (≥174)

### Electrical Properties:

Dielectric Breakdown Strength, IEC 60243-1, kV/mm 16

## 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. 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.
5. Excess cured material can be removed with a knife or single edge razor blade..

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

LMS dated May 1, 2001. 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**

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

**Note:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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## Reference 1.1

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