

LOCTITE® SI 5150®

February 2016

PRODUCT DESCRIPTION

LOCTITE® SI 5150® provides the following product characteristics:

Technology	Silicone
Chemical Type	Oxime silicone
Appearance (uncured)	Translucent clear liquid ^{LMS}
Components	One component - requires no mixing
Cure	Room temperature vulcanizing (RTV)
Application	Sealing
Specific Benefit	- Adheres to a wide range of substrates - Excellent weatherability

LOCTITE® SI 5150® is a one-part, neutral, non-corrosive fast curing silicone sealant which offers excellent adhesion, compatibility with a wide variety of substrates and excellent weatherability. LOCTITE® SI 5150® silicone sealant is typically used as a perimeter weatherseal, to seal out water and environmental elements in window installations, and general purpose sealing applications where acetic acid corrosion can be an issue. It can be used on brick, stone, concrete, glass, metal, plastic (except polycarbonate) and painted surfaces.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.03 to 1.05 ^{LMS}
Extrusion Rate, g/min:	
Pressure 0.62 MPa, time 15 seconds, temperature 25 °C:	
Semco Cartridge	100 to 400 ^{LMS}
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Surface Cure

Tack Free Time, minutes:	
Cured @ 25 °C / 50±5 % RH	≤120 ^{LMS}

Cure Properties

Full cure @ 25 °C, days	2 to 4
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TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 1 week @ 25 °C / 50±5 % RH

Physical Properties:

Shore Hardness, ISO 868, Durometer A	11 to 27
Elongation, at break, ISO 37, %	≥300 ^{LMS}
Tensile Strength, ISO 37	N/mm ² (psi)
	≥0.69 ^{LMS} (≥100)

Electrical Properties:

Dielectric Breakdown Strength, IEC 60243-1, kV/mm	20.4
Dielectric Constant / Dissipation Factor, IEC 60250:	
1 kHz	2.84 / 0.012
100 kHz	2.82 / 0.001
1 MHz	2.82 / 0.002

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:

- For best performance bond surfaces should be clean and free from grease.
- 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.
- The bond should be allowed to cure (e.g. seven days), before subjecting to heavy service loads.
- Excess material can be easily wiped away with non-polar solvents.

Loctite Material Specification^{LMS}

LMS dated March 16, 2009. 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

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

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Reference 0.1

Note:

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