

LOCTITE® SI 59 W SUPERSEALANT®

Known as LOCTITE® Supersealant 59 White®
January 2015

PRODUCT DESCRIPTION

LOCTITE® SI 59 W SUPERSEALANT® provides the following product characteristics:

Technology	Silicone
Chemical Type	Neutral Cure Silicone
Appearance (uncured)	White
Components	One component - requires no mixing
Cure	Room temperature vulcanizing (RTV)
Application	Gasketing and sealing
Specific Application	Gasket dressing or Gasket replacement
Specific Benefit	<ul style="list-style-type: none">• Non-sag paste cures into silicone rubber with long life• Excellent resistance to automotive engine oils• Non-corrosive• Bonds well with many substrates, including metals and most plastics

LOCTITE® SI 59 W SUPERSEALANT® is a one-part, neutral curing RTV silicone adhesive/sealant. It cures on exposure to moisture in the air. Cure times will vary with temperature, humidity and gap. LOCTITE® SI 59 W SUPERSEALANT® is suitable for sealing solar cell systems, industrial buzzer pizzas, oil sumps, timing belt covers and bus body glass and making form-in-place gaskets in gearboxes, pumps and other automotive applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.3 to 1.5

Extrusion Rate, g/min:

Pressure 0.62 MPa, time 15 seconds, temperature 25 °C:
Semco Cartridge 200 to 650

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 8 to 20

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 25 °C / 50±5 % RH

Physical Properties:

Shore Hardness, ISO 868, Durometer A	35 to 55
Elongation, ISO 37, %	≥150
Tensile Strength, ISO 37	N/mm ² ≥1.1 (psi) (≥160)

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. Surface Preparation:

- Surface must be sound, clean and dry.
- Remove any loose material or old sealant.
- Solvent cleaning: Wipe the joint surface using a non-oily solvent such as white spirits or mineral turpentine on a clean, white, lint-free cloth. Immediately wipe with a second, dry cloth.
- Remove dust with an oil-free compressed air blast.
- If necessary, wash using solvent and allow to dry (observe proper precautions when using flammable solvent).

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. Full performance properties will develop over 72 hours.
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..

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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\mu\text{m} / 25.4 = \text{mil}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{N/mm}^2 \times 145 = \text{psi}$

$\text{MPa} \times 145 = \text{psi}$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

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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Henkel Americas
+860.571.5100

Henkel Europe
+49.89.320800.1800

Henkel Asia Pacific
+86.21.2891.8859

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