

LOCTITE® SI 5366™

Known as LOCTITE® 5366™
May 2014

PRODUCT DESCRIPTION

LOCTITE® SI 5366™ provides the following product characteristics:

Technology	Silicone
Chemical Type	Acetoxy silicone
Appearance (uncured)	Clear paste
Components	One component - requires no mixing
Cure	Room temperature vulcanizing (RTV)
Application	Bonding or Sealing
Flexibility	Enhances load bearing & shock absorbing characteristics of the bond area.

LOCTITE® SI 5366™ has been designed specifically for use as a bonding agent to ensure perfect sealing, as well as bonding and protection. Typical applications include sealing side windows in trains, sealing heat sources (ovens, heat exchangers, steam circuits, water heaters), providing protection/insulation of electrical boxes, bonding of HCR silicones and in the general care and maintenance applications in various fields. This product is typically used in applications up to 250 °C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.04
Extrusion Rate, g/min	100
Flow, ISO 7390, mm	<2
Flash Point - See SDS	

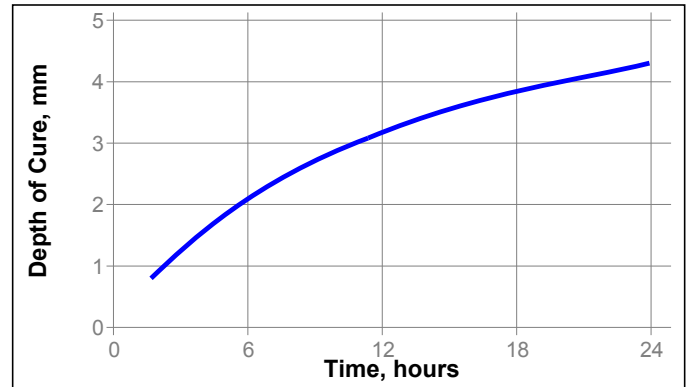
TYPICAL CURING PERFORMANCE

Surface Cure

LOCTITE® SI 5366™ becomes tack free on exposure to atmospheric moisture within 5 minutes at 23±2°C / 50±5%RH.

Depth of Cure

The graph below shows the increase in depth of cure with time at 23±2 °C / 50±5 % RH.



TYPICAL PROPERTIES OF CURED MATERIAL

After 7 days @ 25 °C / 50% RH, 0.5 mm thick film

Physical Properties:

Shore Hardness, ISO 868, Durometer A	25
Elongation, at break, ISO 37, %	530
Tensile Strength, ISO 37	N/mm ² 2.5 (psi) (360)

Electrical Properties:

Dielectric Breakdown Strength, IEC 60243-1, kV/mm	18
Volume Resistivity, IEC 60093, Ω·cm	1×10 ¹⁴
Dielectric Constant, IEC 60250: 1MHz	2.8

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Cured for 7 days @ 25 °C / 50% RH

Lap Shear Strength, ISO 4587:

Aluminum(1 mm sand-blasted thick bondline)	N/mm ² 2 (psi) (290)
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TYPICAL ENVIRONMENTAL RESISTANCE

Typical Fluid Immersion Properties

Aged @ 22 °C for 5,000 hours, 2 mm thick film:

Sodium Carbonate, 25%:

Volume Swell, %	-0.2
Change in Tensile Strength, %	-12
Change in Elongation, %	-10

Sodium Chloride, 25%:	
Volume Swell, %	-0.1
Change in Tensile Strength, %	0
Change in Elongation, %	0
Hydrochloric Acid, 2%:	
Volume Swell, %	-0.1
Change in Tensile Strength, %	-8
Change in Elongation, %	-8
Lactic Acid, 12%:	
Volume Swell, %	0.3
Change in Tensile Strength, %	4
Change in Elongation, %	10
Citric Acid, 12%:	
Volume Swell, %	-0.1
Change in Tensile Strength, %	-0.3
Change in Elongation, %	0
Soda, 25%:	
Volume Swell, %	-7
Change in Tensile Strength, %	-15
Change in Elongation, %	-15
Bleach, commercial concentration:	
Volume Swell, %	-1
Change in Tensile Strength, %	-20
Change in Elongation, %	-15

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. When joint is assembled pressure should be applied to spread the adhesive out and fill the joint completely.
4. The bond should be allowed to cure (e.g. seven days), before subjecting to heavy service loads.

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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Reference 1.2