

LOCTITE® SI 598™

November 2018

PRODUCT DESCRIPTION

LOCTITE® SI 598™ provides the following product characteristics:

Technology	Silicone
Chemical Type	Oxime silicone
Appearance (uncured)	Metallic black paste
Components	One component – requires no mixing
Thixotropic	Reduced migration of liquid product after application to substrate.
Cure	Room temperature vulcanizing (RTV)
Application	Gasketing and sealing
Flexibility	Enhances load bearing & shock absorbing characteristics of the bond area.
Specific Application	Gasket replacement or gasket dressing
Specific benefits	Excellent resistance to automotive engine oils

LOCTITE® SI 598™ cures on exposure to moisture in the air to form a tough, flexible, silicone rubber gasket. This product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. Typical applications include oil pans, transmission pans, valve covers, valves and guides, timing gear covers, and differential covers. This product is typically used in applications with an operating range of -54°C to 260°C.

Typical properties of uncured material

Specific Gravity @ 25°C	1.27 to 1.32
Extrusion Rate, g/min: Pressure 0.62 MPa, time 15 seconds, temperature 25°C: Semco cartridge	220 to 550
Flow, ISO 7390, mm: After 3 minutes	≤13
Flash point - see SDS	
Odor	No acetic odor

Typical curing performance

Surface cure

Tack free time, minutes Cured @ 25 °C / 50±5 % RH	≤25
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Typical properties of cured material

Cured for 7 days @ 25 °C, 50±5% RH

Physical properties:

Tensile Strength, ISO 37	N/mm ² (psi)	≥1.3 (≥190)
Elongation, ISO 37, %		≥325
Shore Hardness, ISO 868, Durometer A		26 to 40

Typical environmental resistance

The product retains effective properties in contact with automotive fluids, such as motor oil, transmission fluids, alcohol and antifreeze solutions.

NOTE: Not recommended for parts in contact with gasoline.

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.

Direction for use

1. For best performance bond surfaces should be clean and free from grease.
2. Full performance properties will develop over 72 hours.
3. 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.
4. Excess material can be easily wiped away with non-polar solvents.

NOTE: LOCTITE® SI 598™ is not recommended for use as a cylinder head gasket or head gasket sealant.

5. For full automatic applications a volumetric dispensing system is recommended.

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 Henkel representative.

Product Specification

The technical data contained herein are intended as reference only and are not considered specifications for the product.

Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact a Henkel representative for related approval or certificate of this product.

Data Ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 µm / 25.4 = mil
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

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