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# Technical Data Sheet

## Product 5920

Worldwide Version, October 1995

### PRODUCT DESCRIPTION

LOCTITE® Product 5920 is a one component, room temperature curing RTV silicone non-sag paste formulated for low volatility applications, as in oxygen sensor equipped General Motors' engines. Good for applications up to 350°C.

### TYPICAL APPLICATIONS

This product is used to fill voids and irregularities in surfaces for a positive seal. It adheres to metal, glass, natural and synthetic fibers, wood, ceramics, other silicone rubbers, pointed surfaces and many plastic substrates. Product 5920 can be used on all assemblies where an engine manufacturer recommends room temperature vulcanizing (RTV). It is also used for electrical insulating applications.

### Approvals

This product meets General Motors' silicone volatility specifications.

### PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Oxime Silicone Rubber
Appearance	Metallic copper paste
Specific Gravity @ 25°C	1.05
Viscosity @ 25°C	Thixotropic Paste
Flash Point (TCC), °C	>93

### TYPICAL PROPERTIES OF CURED MATERIAL

#### Physical Properties

Coefficient of thermal expansion, ASTM D696, K <sup>-1</sup>	0.1
Coefficient of thermal conductivity, ASTM C177, W.m <sup>-1</sup> K <sup>-1</sup>	0.21
Specific Heat, kJ.kg <sup>-1</sup> K <sup>-1</sup>	0.3
Hardness, ASTM D2240, Shore A:	31
Tack-free time, min	30
Non-volatile content, %	98
Full cure time, hrs.	24

### PERFORMANCE OF CURED MATERIAL

(After 14 days @ 23±2°C, 60±5% RH at 0.5mm gap)

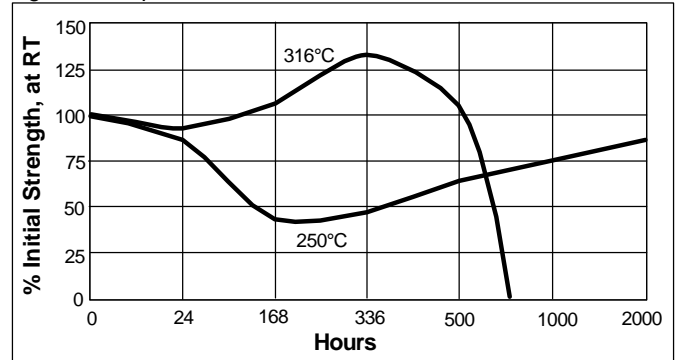
	Typical Value
Tensile strength, ASTM D412, N/mm <sup>2</sup> :	1.9
(psi)	(275)
% Elongation to break, ASTM D412:	355

### TYPICAL ENVIRONMENTAL RESISTANCE

#### Heat Aging

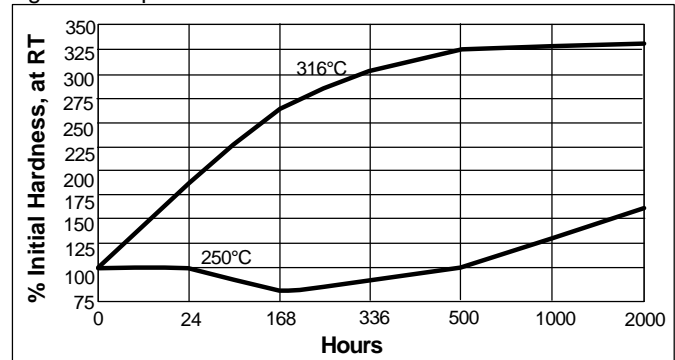
% Tensile Strength - ASTM D412

Aged at temperature indicated and tested at 22°C.



% Shore A Hardness - ASTM D2240

Aged at temperature indicated and tested at 22°C.



### 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, (MSDS).

#### Directions for use

Clean mating surfaces to remove all traces of oil and old gasketing material.

NOTE: Do not use petroleum cleaners such as mineral spirits, kerosene, or gasoline to clean parts as they will leave an oily film.

Apply Product 5920 in a continuous bead around all holes and perimeters of the mating parts. Assemble parts together while sealant is still wet (approximately 10 minutes). Place and torque bolts.

Sealant will become tack-free in less than one hour, and will cure to a depth of 6mm (1/4 inch) within 24 hours.

**Storage**

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact your local Technical Service Center.

**Data Ranges**

The data contained herein may be reported as a typical value and/or range (based on the mean value  $\pm 2$  standard deviations). Values are based on actual test data and are verified on a periodic basis.

**Note**

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

**CAUTION: DO NOT USE FOR APPLICATIONS WHERE SEALANT IS IN CONSTANT CONTACT WITH GASOLINE. DO NOT USE FOR HEAD GASKETING.**