

LOCTITE STYCAST G 508-9

February 2016

PRODUCT DESCRIPTION

LOCTITE STYCAST G 508-9 provides the following product characteristics:

Technology	Epoxy
Appearance	Beige
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none">• Readily pourable• Good surface appearance• Low coefficient of thermal expansion• Low thermal conductivity
Application	Encapsulant

LOCTITE STYCAST G 508-9 is a pourable, flame retardant epoxy with exceptional resistance to heat, water, freon and other strong solvents. It is recommended for applications requiring long term electrical service up to 180°C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, 25 °C, mPa·s (cP):

Spindle 6, speed 10 rpm 60,000

Density @ 25 °C, g/cc 1.61

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Gel Time

1 hour @ 125°C

8 minutes @ 160°C

4 minutes @ 180°C

Cure Schedule

2 hours @ 125°C

30 minutes @ 160°C

12 minutes @ 180°C

Cure at any one of the recommended cure schedules.

In case LOCTITE STYCAST G 508-9 has solidified or has a higher viscosity than normal, heat material to 60°C for 1 hour to reduce viscosity and liquefy the material. After heating, it can then be cured as per any of the cure schedules listed above.

Recommended cure schedule for minimum shrinkage during cure is 3 hours @ 125°C.

Moderate heat is generated during cure. No adverse exotherm effects when cured at 125°C, in masses up to about 50 grams.

This product may generate excessive heat if cured in thicknesses greater than 0.5 inch at a temperature above 125°C. Dielectric strength and other evaluated temperature and electrical properties can be further improved by post-curing for 1 hour @ 180°C or 2 hours @ 150°C.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Shore Hardness, Shore D:

@ 25°C 85

@ 120°C 65

Thermal Conductivity, W/(m·K) 0.576

Electrical Properties

Volume Resistivity, ASTM D257, ohms-cm:

@ 25°C 4×10^{14}

@ 180°C 2×10^{10}

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

DIRECTIONS FOR USE

1. In case LOCTITE STYCAST G 508-9 has solidified or has a higher viscosity than normal, heat material to 60°C for 1 hour to reduce viscosity and liquefy the material. After heating, it can then be cured as per the regular cure schedule..

Conversions

(°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil

mm / 25.4 = inches

N x 0.225 = lb

N/mm x 5.71 = lb/in

psi x 145 = N/mm²

MPa = N/mm²

N·m x 8.851 = lb·in

N·m x 0.738 = lb·ft

N·mm x 0.142 = oz·in

mPa·s = cP

Disclaimer

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

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, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel 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 Henkel 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.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Loctite:](#)

[1188751](#)