

# LOCTITE® STYCAST 1267

October 2020

## PRODUCT DESCRIPTION

LOCTITE® STYCAST 1267 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Transparent
<b>Components</b>	Two components
<b>Mix Ratio by weight: Part A: Part B</b>	100 : 28
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>● Transparent</li> <li>● Low viscosity</li> <li>● Toughness</li> <li>● Impact resistance</li> <li>● Long pot life</li> <li>● Low exotherm</li> <li>● Room temperature cure capability</li> <li>● Good moisture resistance</li> <li>● Good electrical properties</li> <li>● Excellent adhesion to a variety of substrates</li> </ul>
<b>Cure</b>	Room temperature cure
<b>Application</b>	Electronic Encapsulants, Potting, Casting

LOCTITE® STYCAST 1267 epoxy encapsulant may be used for display embedments, to bond lenses and sheets of glass for good visibility, and to impregnate windings.

This adhesive can withstand continuous exposure at temperatures as high as 95°C and short term exposures up to 120°C with only slight discolouration and no deleterious effects on physical and electrical properties.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Mixed Properties :

Density, g/cm <sup>3</sup>	1.15
Mixed Viscosity @ 25 °C, mPa·s (cP)	500
Refractive Index	1.56
Pot Life , minutes	30
Shelf Life @ 25°C, days	365

## TYPICAL CURING PERFORMANCE

**Cure Schedule**  
8 hours @ 25°C

**Post Cure**  
2 hours @ 95°C

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

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties :

Hardness, Shore D 77.5

### Electrical Properties:

Dielectric Strength , kV/mm 15.8

Dielectric Constant / Dissipation Factor @ 1 MHz 3/0.02

Volume Resistivity @ 25°C, ohm-cm >1×10<sup>14</sup>

### Adhesive Properties:

Compressive Strength N/mm<sup>2</sup> 80  
(psi) (11,600)

Flexural Strength N/mm<sup>2</sup> 120  
(psi) (17,400)

## GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

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.

**DIRECTIONS FOR USE**

1. Long exposure of the cured resin to temperatures above 120°C will cause some discolouration. Physical and electrical properties are not appreciably effected.
2. Prepare materials and mold for use.
3. Add 28 parts of Part B to 100 parts by weight of Part A. Mix thoroughly. Pot life will be about 30 minutes. Use small batches. Use multiple pouring for castings over 100 grams.
4. Pour. Use vacuum evacuation if necessary.
5. Allow to stand at room temperature for 8 hours. The casting can be removed from mold when hard. A post cure at 95°C for 2 hours will increase the hardness of the cured resin and its dielectric strength.
6. Curing at temperatures of 50 to 65°C to speed production is possible, and depends both on resin mass, and the geometry of the unit to be potted. To determine optimum conditions, user should run a few experiments on the particular unit.

**Storage**

Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

**Optimal Storage: 25°C. Storage below 25°C or greater than 25°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.

**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.

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\text{N} \times 0.225 = \text{lb/F}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{psi} \times 145 = \text{N/mm}^2$   
 $\text{MPa} = \text{N/mm}^2$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

**Disclaimer**

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, 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 1