

# LOCTITE STYCAST EE 0079-HD 0070

November 2016

## PRODUCT DESCRIPTION

LOCTITE STYCAST EE 0079-HD 0070 provides the following product characteristics:

<b>Technology</b>	Epoxy
Appearance, Resin (Component A)	Gardener 1
Appearance, Hardener (Component B)	Gardener 2
Appearance (cured)	Light amber
Components	Two components - requires mixing
Mix Ratio, by volume - Part A: Part B	100 : 26
Mixing Ratio, by weight Component A: Component B	100 : 25
<b>Cure</b>	Heat cure
<b>Application</b>	Casting

LOCTITE STYCAST EE 0079-HD 0070 is a low viscosity, general casting system with excellent electrical and physical properties. The resin and hardener have been filtered through 3 micron elements to remove particulate material. This system can be used where clarity after cure is required.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Part A Properties STYCAST EE 0079

Solids Content, %	0
Flash Point, °C	68
Density, @ 25 °C, g/cm <sup>3</sup>	1.12 to 1.14
Viscosity, Brookfield - RVF, 25 °C, cps:	
Spindle 2, speed 10 rpm	500 to 700

### Part B Properties STYCAST HD 0070

Solids Content, %	66 to 72
Flash Point, °C	102
Density, @ 25 °C, g/cm <sup>3</sup>	1.0 to 1.2
Viscosity, Brookfield - RVF, 25 °C, cps:	
Spindle 5, speed 4 rpm	4,500 to 7,500

### Mixed Properties

Pot Life @ 25 °C, minutes:	
200 g mass	25
Peak Exotherm Temperature, °C:	
200 g mass	200
Gel Time 125 °C, minutes	30
Viscosity, Brookfield - RVF, cps:	
Spindle 5, speed 20 rpm, @ 25°C	1,500

## TYPICAL CURING PERFORMANCE

### Recommended Curing Conditions

2 hours @ 60 °C Casting may be cooled to reduce exotherm until gallation. Then post cure 2 hours @ 60°C for 4 hours @ 50°C. Note: guard against moisture - use dry environment.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties :

Coefficient of Linear Thermal Expansion, in/in/°C (30 to 90°C)	66×10 <sup>-6</sup>
Compressive Strength, psi	18,000
Density, gm/cc	1.19
Linear Shrinkage, %	0.6
Hardness, Shore D	85
Tensile Strength, psi	8,000
Elongation, %	5
Thermal Conductivity, cal/cm-sec-°C	5×10 <sup>-4</sup>
Flexural Strength, psi	18,000
Heat Deflection Temperature @ 264 psi, °C	80
Izod Impact Strength, ft-lb/in. of notch	0.22
Moisture Absorption, 24 hrs immersion, %	0.2
Guide to Operating Class, IEEE °C	105

### Electrical Properties:

Dielectric Strength, 10 mil thickness, volts/mil	2,150
Arc Resistance, seconds	92
Dielectric Constant / Dissipation Factor @ 25°C:	
1 kHz	3.8 / 0.011
Dielectric Constant / Dissipation Factor @ 105°C:	
1 kHz	5.9 / 0.782
Volume Resistivity, ohm-cm	1×10 <sup>16</sup>
Volume Resistivity, ohm-cm @ 105°C	5×10 <sup>16</sup>

## GENERAL INFORMATION

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

### 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

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

### Disclaimer

#### 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 1

# Mouser Electronics

Authorized Distributor

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

[Loctite:](#)

[397717](#) [498877](#)