

# LOCTITE STYCAST EO 7038 NA

January 2018

## PRODUCT DESCRIPTION

LOCTITE STYCAST EO 7038 NA provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Black
<b>Product Benefits</b>	• One component
<b>Cure</b>	Heat cure
<b>Application</b>	Potting

LOCTITE STYCAST EO 7038 NA is a one component epoxy potting system, formulated to protect sensors used in harsh environments, such as automotive applications.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

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

Spindle 7, speed 20 rpm	40,000
Filler Content, %	61
Gel Time @ 121°C, minutes	16
Pot Life @ 25°C, days	3
Shelf Life @ -40 °C, days	210
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Recommended Cure Schedule

- 3 hours @ 130°C
- 2 hours @ 140°C

### Alternate Cure Schedule

- 2 hours @ 90°C plus 2 hours @ 130°C

The above cure profile is a guideline recommendation. 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

Hardness, Shore D	92
Coefficient of Thermal Expansion :	
Temperature Range: 40 to 100°C, in/in/°C	30×10 <sup>-6</sup>
Glass Transition Temperature (Tg), °C	140
Moisture Absorption, 120 hrs PCT @ 15 psi, %	1.4
Modulus of Elasticity	N/mm <sup>2</sup> 9,500 (psi) (1,377,859)
Flexural Strength	N/mm <sup>2</sup> 92 (psi) (13,343)

## Electrical Properties

Dissipation Factor D @ 25°C :

50 KHz	1.46×10 <sup>-2</sup>
100 KHz	1.26×10 <sup>-2</sup>

Dielectric Constant K @ 25°C

50 KHz	3.8
100 KHz	3.7

:

50 KHz	3.8
100 KHz	3.7

Dissipation Factor D @ 100°C :

50 KHz	4.35×10 <sup>-2</sup>
100 KHz	1.22×10 <sup>-2</sup>

Dielectric Constant K @ 100°C :

50 KHz	3.9
100 KHz	3.6

## 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.

### THAWING:

1. Allow container to reach room temperature before use.

### DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Apply adhesive to all surfaces to be bonded and join together.
3. In most applications only contact pressure is required.

**STORAGE:**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage : -40 °C**

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**

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

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**Reference 2**