

LOCTITE STYCAST EE 0079-HD 0070

November 2016

PRODUCT DESCRIPTION

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

Technology	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
Cure	Heat cure
Application	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 ³	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 ³	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 ⁻⁶
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 ⁻⁴
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 ¹⁶
Volume Resistivity, ohm-cm @ 105°C	5×10 ¹⁶

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:

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