

LOCTITE STYCAST US 0152

February 2016

PRODUCT DESCRIPTION

LOCTITE STYCAST US 0152 provides the following product characteristics:

Technology	Urethane
Appearance, Resin (Component A)	Amber
Appearance, Hardener (Component B)	Black
Appearance (cured)	Opaque black
Components	Two components - requires mixing
Mix Ratio by volume: Part A: Part B	52 : 100
Mix Ratio by weight: Part A: Part B	1 : 2
Cure	Room temperature cure
Application	Potting and Encapsulating

LOCTITE STYCAST US 0152 is an unfilled, low viscosity, reenterable potting and encapsulation compound. It has excellent low temperature properties and surface finish. This material can be used to encapsulate electronics for various applications including under-the-hood automotive and marine. The low glass transition temperature prevents damage to sensitive components during low temperature excursions.

TYPICAL PROPERTIES OF UNCURED MATERIAL
Typical Properties of Liquid Material

Viscosity @ 23 °C, cps	450
Density @ 23°C, gm/cc	1.0
Pot Life @ 23°C, 100 gram mass, minutes	<60

TYPICAL CURING PERFORMANCE
Gel Time

100 gram Mass @ 23°C, minutes	90
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Recommended Cure Schedule

24 hours @ 23°C

Alternate Cure Schedule

2 to 4 hours @ 60 to 85°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

Hardness, Shore A	35
Glass Transition Temperature (T _g), °C	-38
Coefficient of Linear Thermal Expansion, ppm/°C	272
Tensile Strength, psi	100
Elongation, %	180
Coefficient of Thermal Conductivity, W/(m-K)	0.172
Moisture Absorption, 24 hrs immersion, %	0.78
Weight Loss after 168hrs @ 125°C, %	0.14

Linear Shrinkage, % <1.0

Electrical Properties

Dielectric Strength, 20 mil thickness, volts/mil	1,170
Dielectric Constant / Dissipation Factor @ 25°C:	
1 kHz	6.52 / 0.05
100 kHz	5.31 / 0.09
Volume Resistivity, ohms-cm	1.9×10 ¹¹
Surface Resistivity, ohms	1.4×10 ¹³

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.

Liquid Storage - Liquids should be stored between 20°C and 30°C in closed containers.

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

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

Disclaimer
Note:

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