

LOCTITE STYCAST US 5544

November 2016

PRODUCT DESCRIPTION

LOCTITE STYCAST US 5544 provides the following product characteristics:

Technology	Urethane
Appearance, Resin (Component A)	Clear brown
Appearance, Hardener (Component B)	Opaque white
Appearance (Mixture)	Opaque white
Components	Two components - requires mixing
Mix Ratio, by volume - Part A: Part B	1 : 4.81
Mixing Ratio, by weight Component A: Component B	15 : 85
Cure	Room temperature cure
Application	Potting and Encapsulating

LOCTITE STYCAST US 5544 is a fast gelling, flexible, flame retardant, mineral-filled, polyurethane compound. LOCTITE STYCAST US 5544 is a fast-setting potting compound which is low in viscosity, therefore flows well and adheres well to many substrates. It has very low odor and does not contain TDE or mercury compounds.

TYPICAL PROPERTIES OF UNCURED MATERIAL**Part A Properties**

Density @ 23°C, gm/cc	1.23
Viscosity @ 23 °C, cps	75

Part B Properties

Density @ 23°C, gm/cc	1.46
Viscosity @ 23 °C, cps	11,000

Mixed Properties

Density @ 23°C, gm/cc	1.4
Gel Time, minutes	4 to 6
Working Time, minutes	2 to 3
Viscosity @ 23 °C, cps	2,000

TYPICAL CURING PERFORMANCE Recommended Curing Conditions

2 to 4 hours @ 23 °C (Recommended cure)
30 minutes @ 60 to 85°C (Alternate cure)

TYPICAL PROPERTIES OF CURED MATERIAL**Physical Properties :**

Shore Hardness , Durometer A	79 to 89
Coefficient of Thermal Conductivity, W/(m-K)	0.335
Weight Loss after 168 hrs @ 130°C, %	0.19
24 Hour Water Moisture Absorption, %	0.15
Linear Shrinkage, %	0.12
Coefficient of Linear Thermal Expansion, ppm/°C:	
Alpha 1, -40 to 25 °C	114
Alpha 2, 25 to 125 °C	155
Tensile Strength, psi	1,320
Flammability, 9.52mm, 94V-0	Meets rqmrt
Flammability, 6.35mm, 94V-2	Meets rqmrt

Electrical Properties:

Dielectric Strength, volts/mil	>400
Dielectric Constant / Dissipation Factor @ 25°C:	
100 Hz	3.85 / 0.02
Volume Resistivity, ohms-cm	3.6×10 ¹³

REGULATORY NOTICE: This product is regulated by the United State Department of Commerce and may not be exported without license from that Organization. See Material Safety Data Sheet for details

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.

Note: Before using this product please purge approximately 30 ml. of material prior to application. Discard purged material in accordance with the Material Safety Data Sheet. A video instruction is available upon request.

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 at 25°C or below, in closed containers. If stored below 25°C, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination.

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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Reference 1

Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.3898.4800

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