

LOCTITE STYCAST US 5529

November 2016

PRODUCT DESCRIPTION

LOCTITE STYCAST US 5529 provides the following product characteristics:

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| Technology | Urethane |
| Appearance (cured) | Black |
| 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 5529 is a flexible, flame retardant, mineral filled, polyurethane compound. This potting compound has long pot life, and is low viscosity so it flows well and adheres well to many substrates. It has very low odor and does not contain TDI or mercury compounds. Although LOCTITE STYCAST US 5529 is not UL recognized, it does have the same amount of flame retardant chemical as US5528, which is UL recognized.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Properties

| | |
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| Viscosity @ 23°C, cPs | 2,400 |
| Working Time, 300 gm mass @ 23 °C, minutes | 45 |
| Gel Time, 300 gm mass @ 23 °C, minutes | 90 |

TYPICAL CURING PERFORMANCE Recommended Curing Conditions

12 to 24 hours @ 22 to 30 °C (Recommended cure)

Alternative Curing Conditions

1 to 3 hours @ 65 to 85 °C (Alternate cure)

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties :

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| Density, gm/cc | 1.5 |
| Shore Hardness, , Durometer A | 85 |
| Coefficient of Thermal Conductivity, , W/(m-K) | 0.335 |
| Coefficient of Thermal Expansion, ppm/°C | 150 |
| Moisture Absorption, 24 hrs @ 25°C, % | 0.01 |
| Weight Loss after 168hrs @ 130°C, % | 0.004 |
| Tensile Strength, psi | 540 |
| Flammability, 6.1mm, 94V-0 | Passes |
| Flammability, 9.53mm, 94V-0 | Passes |

Electrical Properties:

| | |
|--|----------------------|
| Dielectric Strength, volts/mil | 972 |
| Dielectric Constant / Dissipation Factor @ 25°C: | |
| 100 kHz | 4.0 / 0.04 |
| Volume Resistivity, ohms-cm | 4.5×10 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 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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