Technical Data Sheet

LOCTITE STYCAST U 2535

September 2014

PRODUCT DESCRIPTION

LOCTITE STYCAST U 2535 provides the following product characteristics:

Technology	Polyurethane
Components	Two component - requires mixing
Appearance - Part A	Black
Appearance - Part B	Amber
Product Benefits	• Low viscosity • Silicone free • Flexible • Excellent wetting properties • High temperature resistance
Mix Ratio, by weight - Part A: Part B	100 : 7.6
Operating Temperature	-40 to +150 °C
Application	Encapsulant
Cure	Heat cure

LOCTITE STYCAST U 2535 is an encapsulant designed for transformer, PCB's and other insulation applications. It allows for complete impregnation when used either on small slightly wound coils or large castings. LOCTITE STYCAST U 2535 is very flexible and can be used to replace silicones.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties

Viscosity @ 25 °C, mPa·s (cP)	12,500
Density, g/cc	1.485
Shelf Life @ 18 to 25°C (from date of manufacture), days	183
Flash Point - See SDS	

Part B Properties

Viscosity @ 25 °C, mPa·s (cP)	135
Density, g/cc	1.23
Shelf Life @ 18 to 25°C (from date of manufacture), days	183
Flash Point - See SDS	

Mixed Properties

Mixed Viscosity @ 25°C, mPa·s (cP)	8,000
Time to double initial viscosity, 25 °C, minutes	15
Density, g/cc	1.475
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

4 hours @ 60 to 65°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

Glass Transition Temperature, °C		-50
Coefficient of Linear Thermal Expansion :		
Above Tg, ppm/°C		134
Hardness, Shore A@ 25ºC		80
Young's ModulusUnit}	N/mm² (psi)	10 (1,450)
Thermal Conductivity , W/(m-K)		0.6
Elongation ,%		66
Moisture Absorption, %:		
after 24 hours @ 25ºC		0.6
after 1 hour @ 100ºC		0.6

Electrical Properties

Volume resistivity @ 500 V, Ω-cm	1.7×10^{12}
Surface Resistivity, ohms	1.9×10^{13}
Dielectric Constant / Dissipation Factor:	
@ 50 Hz	7.0/0.05
@ 1 KHz	7.1/0.03
@ 1 MHz	6.0/0.05

TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous:

Tensile Strength	N/mm² (psi)	4 (580)
Tensile Lap Shear Strength	N/mm² (psi)	6 (870)

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

DIRECTIONS FOR USE

1. Before use, stir Part A to make it homogeneous.
2. Accurately weigh Part A and Part B into a clean container in the recommended ratio.
3. Mix thoroughly, degas and fill the casting.

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

Optimal Storage : 18 to 25 °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.

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.

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa = N/mm²
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

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Note:
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