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LOCTITE

Technical Data Sheet

LOCTITE STYCAST E 2534 FR CAT 9

September 2014

PRODUCT DESCRIPTION

LOCTITE STYCAST E 2534 FR CAT 9 provides the following product characteristics:

Technology	Epoxy
Appearance (Resin)	blue
Components	Two component - requires mixing
Mix Ratio, by weight - Resin : Hardener	100 : 4
Product Benefits	• Flame retardant • Halogen free • High thermal conductivity • High dielectric strength
Cure	Room Temperature or Heat Cure
Application	Potting
Operating Temperature - Continuous	-40 to 130°C
Operating Temperature - Intermittent	-40 to 150°C
UL Flammability Rating	UL94V-0 @ 6 mm thickness

LOCTITE STYCAST E 2534 FR CAT 9 epoxy potting compound complies with recent demands on environmentally friendly products and does not contain brominated flame retardants .

LOCTITE STYCAST E 2534 FR CAT 9 can be used with a variety of catalysts. For more information on mixed properties when used with other available catalysts, please contact your local technical service representative for assistance and recommendations.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties *E 2534 FR*

Viscosity @ 25 °C, mPa·s (cP)	350,000
Specific Gravity	2.1
Shelf Life @ 18 to 25°C, year	1
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

16 to 24 hours @ 25°C or
2 hour @ 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 :

Coefficient of Thermal Expansion TMA:		
Below Tg, ppm/°C		39
Glass Transition Temperature (Tg) by TMA, °C		76
Thermal Conductivity , W/(m-K)		1.5
Tensile Modulus, DMTA :		
@ 25 °C	N/mm² (psi)	9,101 (1,319,645)
@ 50 °C	N/mm² (psi)	8,557 (1,240,765)
@ 100 °C	N/mm² (psi)	1,536 (222,720)
@ 150 °C	N/mm² (psi)	167 (24,215)
@ 200 °C	N/mm² (psi)	195 (28,275)
Hardness, Shore D		90
Water Absorption @ 25ºC after 24 hours, %		0.03

Electrical Properties:

Dielectric Constant / Dissipation Factor:	
60Hz	6.6 / 0.03
1 kHz	6.1 / 0.03
1 MHz	6.0 / 0.02

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength :

Aluminum:		
Tested @ 25 °C	N/mm² (psi)	11.06 (1,604)
Tested @ 125 °C	N/mm² (psi)	4.42 (640)
Tested @ 150 °C	N/mm² (psi)	4.74 (687)
Tested @ 180 °C	N/mm² (psi)	3.05 (4.42)
PBT:		
Tested @ 25 °C	N/mm² (psi)	4.64 (725)
Tested @ 125 °C	N/mm² (psi)	2.97 (430)
Tested @ 150 °C	N/mm² (psi)	2.15 (312)
Tested @ 180 °C	N/mm² (psi)	1.55 (225)

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GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Some filler settling is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use. Power mixing is preferred to ensure a homogeneous product.
2. Moderate warming to maximum 40°C of the resin prior to adding the hardener will improve pourability.
3. Pour mixture into cavity or mold.
4. **IMPORTANT:** DO NOT USE CATALYST 27-1 as this hardener is not compatible with the filler, and will cause foaming.

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
psi x 145 = N/mm²
MPa = N/mm²
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer

Note:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.
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