Technical Data Sheet

LOCTITE STYCAST 926-82-1

January 2013

PRODUCT DESCRIPTION

LOCTITE STYCAST 926-82-1 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Cure	Heat cure
Product Benefits	• One component • Good thermal shock resistance • Good chemical resistance • Good thermal conductivity • Low CTE • High temperature properties
Operating Temperature	-40 to 180ºC
Application	Encapsulant
Typical Applications	Casting compound

LOCTITE STYCAST 926-82-1 epoxy encapsulant is designed for use as a casting compound in applications with high temperatures, thermal shock, and chemical exposure.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Brookfield Viscosity , ASTM D2393, cP:	
Spindle 6, Speed 5 rpm	130,000
Density, ASTM D792, g/cm³	1.53
Shelf Life @ 25°C (from date of manufacture), days	91
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

12 minutes @ 175°C
30 minutes @ 160°C
150 minutes @ 120°C

This product generates moderate heat during cure. No adverse exotherm effects are obtained when cured at 125ºC in masses up to approximately 100 grams.

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 D, ASTM D2240:	
@ 25 °C	85
@ 120 °C	35
Linear Shrinkage, ASTM D2566, %	≤0.01

Electrical Properties:

Dielectric Strength, ASTM D149, kV/mm	13.8
Volume Resistivity @ 25 °C, ASTM D257, ohm-cm	1×10^{14}

GENERAL INFORMATION

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

THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.
3. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
4. DO NOT re-freeze. Once thawed to 25°C, the adhesive should not be re-frozen.

DIRECTIONS FOR USE

1. Complete cleaning of the components and substrates should be performed to remove contamination such as dust, moisture, salt and oils which can cause electrical failure, poor adhesion or corrosion in an embedded part.
2. Some separation of components 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.
3. To ensure a void-free embedment, vacuum deairing or degassing should be performed to remove any entrapped air introduced during the mixing operation.
4. Pump-down or pull vacuum on the mixture to achieve an ultimate vacuum or absolute pressure of 1 to 5 torr or mm Hg. The foam will rise several times in the liquid height and then subside.
5. Continue vacuum deairing until most of the bubbling has ceased. This usually takes 3 to 10 minutes.
6. Pour mixture into cavity or mold.
7. Gentle warming of the mold or assembly reduces the viscosity. This improves the flow of the material into the unit having intricate shapes or tightly packed coils or components.
8. Further vacuum deairing in the mold may be required for critical applications.

Storage

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

Optimal Storage: 25°C. Storage below 25°C or greater than 25°C can adversely affect product properties.

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

(°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

Disclaimer

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