

LOCTITE STYCAST 2741 CAT 15

November 2017

PRODUCT DESCRIPTION

LOCTITE STYCAST 2741 CAT 15 provides the following product characteristics:

Technology	Epoxy
Technology (Catalyst)	Amine
Appearance	Black
Appearance (Catalyst)	Black
Components	Two-component
Product Benefits	• Ease of use • Variable flexibility • General purpose • Room temperature cure capability • Shock and impact resistant
Application	Encapsulation
Cure	Room Temperature or Heat Cure
Key Substrates	Glass, Metals, Plastics and Ceramics

LOCTITE STYCAST 2741 CAT 15 is designed for electronic embedment and in sealing or cementing of metals, ceramics and plastics. The hardness can be adjusted by varying the amount of LOCTITE CAT 15 used.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties LOCTITE STYCAST 2741

Density, g/cm ³	1.65
Viscosity, Brookfield, mPa·s (cP)	225,000
Flash Point - See SDS	

Part B Properties LOCTITE CAT 15

Density, g/cm ³	0.97
Viscosity, Brookfield, mPa·s (cP)	25,000
Flash Point - See SDS	

Mixed Properties LOCTITE STYCAST 2741 with LOCTITE CAT 15

Viscosity, Brookfield, mPa·s (cP):	
Rigid Material	37,000
Semi-rigid Material	37,000
Flexible Material	36,000

Density, g/cm ³ :	
Rigid Material	1.32
Semi-rigid Material	1.21
Flexible Material	1.15

Mix Ratio, Material:Catalyst, amount of LOCTITE CAT 15 per 100 parts LOCTITE STYCAST 2741:

By Weight:	
Rigid Material	50 : 100
Semi-rigid Material	100 : 100
Flexible Material	150 : 100
By Volume:	
Rigid Material	85 : 100
Semi-rigid Material	170 : 100
Flexible Material	250 : 100

Work Life (100 g) @ 25°C, minutes:

Rigid Material	120
Semi-rigid Material	140
Flexible Material	160

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

16 to 24 hours @ 25°C
4 to 6 hours @ 45°C
2 to 4 hours @ 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

Hardness:	
Rigid Material, Shore D	80
Semi-rigid Material, Shore D	60
Flexible Material, Shore A	60

Thermal Conductivity, W/(m·K):

Rigid Material	0.35
Semi-rigid Material	0.35
Flexible Material	0.35

Operating temperature, °C:

Rigid Material	-40 to +90
Semi-rigid Material	-55 to +80
Flexible Material	-55 to +65

Water Absorption (24 hr immersion), %:

Rigid Material	0.2
Semi-rigid Material	0.5

Linear Shrinkage, cm/cm:

Rigid Material	0.001
Semi-rigid Material	0.001
Flexible Material	0.001

Electrical Properties

Volume Resistivity, ohms-cm
Dielectric Constant / Dissipation Factor
Dielectric Strength, kV/mm

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Mix the entire contents of STYCAST 2741 W1 to a uniform consistency before removing material.
2. Accurately weigh STYCAST 2741 W1 and Catalyst 15 into a clean container in the recommended ratio.
3. Blend them together thoroughly.
4. Pour into mold or container. If necessary, trapped air is readily removed by vacuum evacuation..
5. MOLD RELEASE 122S should be used if piece is later to be removed.
6. NOTE: During storage at room temperature for long periods, it is possible that the viscosity of STYCAST 2741 W1 can increase and may exceed its upper specification limit. The viscosity can be brought back to the normal level by moderate mixing.

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

Once opened, containers should be purged with dry nitrogen.

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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb/F}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$
 $\text{N} \cdot \text{m} \times 8.851 = \text{lb} \cdot \text{in}$
 $\text{N} \cdot \text{m} \times 0.738 = \text{lb} \cdot \text{ft}$
 $\text{N} \cdot \text{mm} \times 0.142 = \text{oz} \cdot \text{in}$
 $\text{mPa} \cdot \text{s} = \text{cP}$

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Reference 1