

# STYCAST 2741 W1

November 2017

## PRODUCT DESCRIPTION

STYCAST 2741 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Technology (Catalyst)</b>	Amine
<b>Appearance</b>	Black
<b>Appearance (Catalyst)</b>	Black
<b>Components</b>	Two-component
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Ease of use</li> <li>• Variable flexibility</li> <li>• General purpose</li> <li>• Room temperature cure capability</li> <li>• Shock and impact resistant</li> </ul>
<b>Application</b>	Encapsulant
<b>Cure</b>	Room Temperature or Heat Cure
<b>Key Substrates</b>	Glass, Metals, Plastics and Ceramics

STYCAST 2741 W1 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 CAT 15 used.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Part A Properties STYCAST 2741 W1

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

### Part B Properties CAT 15

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

### Mixed Properties STYCAST 2741 W1 with CAT 15

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

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

Mix Ratio, Material:Catalyst, amount of CAT 15 per 100 parts STYCAST 2741 W1:

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.

**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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Reference 1

