

# LOCTITE ECCOBOND EO 1072

September 2012

#### PRODUCT DESCRIPTION

LOCTITE ECCOBOND EO 1072 provides the following product characteristics:

Technology	Ероху
Appearance	Black
Product Benefits	• High Tg
	<ul> <li>Low extractable ionics</li> </ul>
	High performance
	Good shelf life
	Fast curing
Filler Weight, %	50
Components	One-component
Cure	Heat cure
Application	Encapsulant - dam or Encapsulant - fill
Typical Applications	Casting compound

LOCTITE ECCOBOND EO 1072 has a unique rheology that allows the same product to be used as both a dam and fill encapsulant. It is intended for applications requiring excellent handling properties.

#### **TYPICAL PROPERTIES OF UNCURED MATERIAL**

Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 7,, speed 2 rpm	100,000
Spindle 7,, speed 20 rpm	80,000
Specific Gravity @ 25°C	1.65
Pot life@ 25°C, days	30
Gel Time, minutes:	
@ 121°C	5
@ 140°C	3
Shelf Life @ 5°C, days	183
Flash Point - See SDS	

# **TYPICAL CURING PERFORMANCE**

#### **Recommended Cure Schedule**

5 minutes @ 140 to 150°C

The above cure profile is a guideline recommendation. 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 :

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Coefficient of Thermal Expansion, ppm/°C:		
Below Tg		43
Above Tg		123
Glass Transition Temperature (Tg), °C		135
Coefficient of Thermal Conductivity, , W/(m-K)		0.51
Flexural Modulus	N/mm² (psi)	6,700 (972,000)
Flexural strength	N/mm² (psi)	60 (8,700)
Extractable Ionic Content, :		
Chloride (Cl-)		100
Sodium (Na+)		5
Water Absorption PCT @ 15psi, %:		
96 hours in immersion @ 121°C, 100% RH		3.14
Shore Hardness, Shore D		≥90
Elongation ,%		0.9
Linear Shrinkage, 10 grams, %		0.84

#### **Electrical Properties:**

Dielectric Constant / Dissipation Factor, IEC 60250:				
1 kHz	4.76 / 0.004			
10kHz	4.74 / 0.0061			
100 kHz	4.7 / 0.0101			
1 MHz	4.63 / 0.0137			
10 MHz	4.58 / 0.0431			
Volume Resistivity, IEC 60093, Ω·cm	6.57×10 <sup>15</sup>			
Surface Resistivity, IEC 60093, Ω 2.41×				

# **GENERAL INFORMATION**

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

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

# 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.

#### THAWING:

1. Allow container to reach room temperature before use.



#### **Directions for use**

- 1. When the material is dispensed onto heated substrate (85 to 100°C), it will perform as flow control dam.
- 2. When dispensed onto lower temperature (45 to 60°C) substrate, the material flows and works as a fill encapsulant.

# STORAGE:

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

# Optimal Storage : 5 °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.

# Conversions

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm  $\ge 25.4 =$  V/mil mm / 25.4 = inches N  $\ge 0.225 =$  lb N/mm  $\ge 5.71 =$  lb/in psi  $\ge 145 =$  N/mm<sup>2</sup> MPa = N/mm<sup>2</sup> N·m  $\ge 8.851 =$  lb·in N·m  $\ge 0.738 =$  lb·ft N·mm  $\ge 0.142 =$  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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