

LOCTITE ECCOBOND EO 1072

September 2012

PRODUCT DESCRIPTION

LOCTITE ECCOBOND EO 1072 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Product Benefits	<ul style="list-style-type: none"> • High Tg • Low extractable ionics • 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 :

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/mm ² 6,700 (psi) (972,000)
Flexural strength	N/mm ² 60 (psi) (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 ¹⁵
Surface Resistivity, IEC 60093, Ω	2.41×10 ¹⁷

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

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

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Reference 1