

LOCTITE ECCOBOND LM8895M

January 2016

PRODUCT DESCRIPTION

LOCTITE ECCOBOND LM8895M provides the following product characteristics:

Technology	Epoxy
Appearance	Black liquid
Cure	Heat cure
Product Benefits	• Non-conductive • Halogen free • Stencil or screen printable
Application	Wafer Backside Coating (WBC)

LOCTITE ECCOBOND LM8895M thermosetting epoxy adhesive developed for semiconductor package coating applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):

Speed 5 rpm 5,800

Solvent Content, % 42

Work Life @ 25°C, 25% change in viscosity, hours >12

Shelf Life @ -40 °C, days 183

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Cure Schedule

2 hours @ 150°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

Glass Transition Temperature, TMA penetration mode, °C 17

Coefficient of Thermal Expansion, TMA expansion mode:

Below Tg, ppm/°C 26

Above Tg, ppm/°C 177

Storage Modulus, DMA:

@ 25°C N/mm² 3,100

(psi) (449,617)

@ 245°C N/mm² 144

(psi) (20,885)

Extractable Ionic Content, ppm:

Chloride (Cl-) <200

Sodium (Na+) <50

Potassium (K+) <50

TYPICAL PERFORMANCE OF CURED MATERIAL

Shear Strength

Die Shear Strength, Kg

3 x 3 mm Si die on ceramic:

@ 25°C

@ 245 °C

15

3

GENERAL INFORMATION

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

THAWING:

1. This adhesive is packed and shipped in dry ice at -40°C.
2. Inside every dry ice shipment is a small packet containing ABLECUBE. This small blue cube retains its shape at -40°C. If exposed to higher temperatures, the cube will melt. If the ABLECUBE has melted upon receiving inspection, place the entire shipment in a -40°C freezer and contact your Ablestick Customer Service Representative.
3. Transfer the syringes from the shipping container to a -40°C freezer without ANY delays.
4. Freeze-thaw voids can form in the syringes if syringes are repeatedly thawed and refrozen.

DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oil, grease, scale, mold release and loose foreign matter. Vinyl surfaces should be cleaned by wiping with clean cloth saturated with methyl ethyl ketone.
2. Apply adhesive to all surfaces to be bonded and join together.
3. In most applications only contact pressure is required.

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.

Storage

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

Optimal Storage : -40 °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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

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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