

LOCTITE ECCOBOND UF 2800B

October 2015

PRODUCT DESCRIPTION

LOCTITE ECCOBOND UF 2800B provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Components	One-component
Product Benefits	• Reworkable • Cures rapidly at low temperatures • Minimizes thermal stress • Rapid device throughput • Excellent protection for solder joints against mechanical stress
Cure	Heat Cure
Application	Underfill
Typical Assembly Applications	Chip scale packages and BGA

LOCTITE ECCOBOND UF 2800B epoxy reworkable underfill is designed to provide protection for solder joints against induced stress, increasing both drop test and temperature cycle performance of the device.

TYPICAL PROPERTIES OF UNCURED MATERIAL

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

cp #51, 50 rpm 1,600

Pot Life @ 25°C, days >14

Shelf Life @ 2 to 8°C, days 365

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Recommended Cure Schedule

5 minutes @ 120°C

2 minutes @ 130°C

Curing above 140°C is not recommended.

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

Cured for 60 minutes @ 120°C,

Physical Properties

Coefficient of Thermal Expansion, ppm/°C:

Below Tg 55

Above Tg 160

Glass Transition Temperature (Tg) by TMA, °C 77

Storage Modulus, GPa 3.5

GENERAL INFORMATION

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

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.

DIRECTIONS FOR USE

For best results, substrate should be preheated (up to 70°C) to allow fast capillary flow

Removal Procedure

1. Heat the underfill approximately 240°C using a hot air nozzle on standard BGA rework equipment.
2. Component can be twisted and removed.
3. Clean and remove residue using a tacky flux or liquid flux and a solder removal vacuum tool.

Storage

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

Optimal Storage : 2 to 8 °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

(°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil

mm / 25.4 = inches

N x 0.225 = lb

N/mm x 5.71 = lb/in

N/mm² x 145 = psi

MPa = N/mm²

MPa x 145 = psi

N·m x 8.851 = lb·in

N·m x 0.738 = lb·ft

N·mm x 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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Reference 0.1