



UV8800M™

November 2009

PRODUCT DESCRIPTION

UV8800M™ provides the following product characteristics:

Technology	Epoxy
Appearance	Medium grey paste
Product Benefits	<ul style="list-style-type: none"> • One component • Medium viscosity • Cures rapidly • Low shrinkage • Excellent adhesion
Filler Weight, %	53.6
Cure	Ultraviolet (UV) light
Application	Encapsulant
Typical Package Application	Chip scale packages and BGA
Substrates	Glass, Epoxy, Polyimide and Polyester

UV8800M™ epoxy encapsulant is developed to meet high temperature thermal cycling specifications. It offers a hard translucent coating when exposed to UV light of sufficient intensity. The curing of the product is not inhibited by oxygen, resulting in excellent surface cure. Its viscosity characteristics and deaerated condition make it suitable for accurate dispensing with excellent shape control.

TYPICAL PROPERTIES OF UNCURED MATERIAL

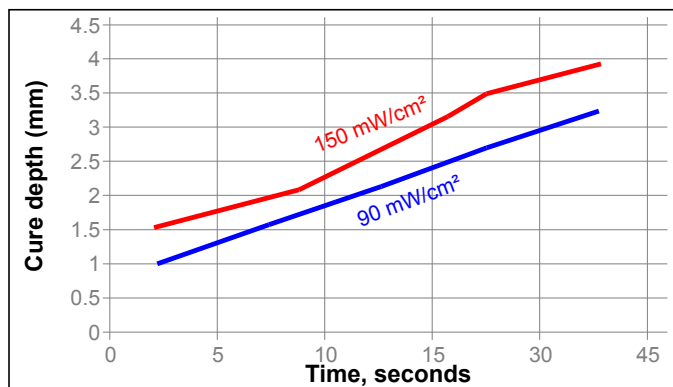
Viscosity @ 25 °C, mPa·s (cP)	2,500 to 4,000
Specific Gravity	1.6
Filler Particle Size, µm:	
D95	21
D50	5
Shelf Life @ 0 to 5°C, months	6
Flash Point - See MSDS	

TYPICAL CURING PERFORMANCE

Typical UV Cure Condition

Medium pressure mercury vapor lamp, seconds	30
100 mW/cm ²	
Minimum UV Cure Condition:	
UV radiation, nm (UVA)	315 to 400

The above cure profile is a guideline recommendation. The speed and depth of cure will depend on the UV intensity measured at the product surface.



TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties:

Coefficient of Thermal Expansion ISO 11359-2:	
Below Tg, ppm/°C	41
Above Tg, ppm/°C	135
Glass Transition Temperature (Tg), °C	29
Shore Hardness, Durometer D	78
Extractable Ionic Content, MIL-S-883, ppm:	
Chloride (Cl-)	34
Fluoride (F-)	237
Water Absorption, %:	
24 hrs @ 25°C	0.9
DMA Modulus @ 25°C, MPa	2,850

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.

Storage

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

Optimal Storage: 0 to 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

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

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

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Reference 0.0