



U.S. Corporate Headquarters
400 Valley Rd.
Warrington, PA 18976
1(800) 523-2575 / (215) 343-6484
1(800)343-3291 fax
info@polysciences.com

Polysciences Europe GmbH
Handelsstrasse 3
D-69214 Eppelheim, Germany
+(49) 6221-765767
+(49) 6221-764620 fax
info@polysciences.de

Polysciences Asia-Pacific, Inc.
2F-1, 207 Tunhwa N. Rd.
Taipei, Taiwan 10595
(886) 2 8712 0600
(886) 2 8712 2677 fax
info@polysciences.tw

NoSWEEP™ Wire Bond Encapsulant EW8002

TECHNICAL DATA SHEET 667

Page 1 of 1

DESCRIPTION

Polysciences, Inc. Low Viscosity thermal only NoSWEEP™ Wire Bond Encapsulant is a novel, 100% solids, one component, silica filled liquid encapsulant designed for quick self leveling, in large Dam and Fill applications, easy dispensing at lower temperatures including RT, and encapsulation of very narrow diameter, long and ultra fine pitch wire bonds on semiconductor devices. NoSWEEP™ can be dispensed onto the wires immediately after wire bonding, flowing easily between and around the wires without causing sweep or sag and without voids.

CUSTOMER BENEFITS

NoSWEEP™ Liquid Encapsulant offers the following distinct advantages over conventional molding systems:

- Enables implementation of 35µm pitch roadmap wire bonding
- Enhanced stress management through the ability to achieve low modulus for a given CTE
- Allows for the use of longer wires with low cost, high-density substrates and enable simple die shrinks
- Enables cost reduction through the use of thinner diameter gold wire
- Fast flow and self leveling properties for large Dam and fill applications
- Excellent adhesion to both inorganic and organic substrates

UNCURED (WET) PROPERTIES

Color Black

Filler Content Filler avg size/max 6/30 microns
70%

Viscosity @ 25°C RVDV-II+ , Spindle 14, Cup 6R
50 kcps @ 0.5 rpm

Pot Life @ 25° C
>24 hours

Density
1.7 gram/cm³

PROCESS PARAMETERS

Cure Cycle

60 min. @ 100°C + 60 min. @ 165°C

Alternate Cure Cycle

30 min. @ 100°C + 120 min. @ 150°C

CURED PROPERTIES

Glass Transition Temp. (Tg) by DMA
150°C

Coefficient of Thermal Expansion (CTE)
15 ppm/°C

Flexural Modulus (Three Point Bend)
2.0 GPa @ 25°C

Extractable Ionic Content
Cl<10
K<5
Na<10
F<5

STORAGE AND HANDLING

Shipping Recommended temperature is -40°C, RT
TBD

Storage Store at -40°C for up to 1 year

Safety Refer to MSDS for safe handling practices.

All values are considered typical based on tests believed to be accurate. Polysciences, Inc. may change the data as appropriate.

North America (United States)

1 (800) 523-2575 / (215) 343-6484

1 (800) 343-3291 / (215) 343-0214 fax

Europe (Germany)

(49) 6221-765767 / (49) 6221-764620 fax

Asia-Pacific (Taiwan)

(886) 2 8712 0600 / (886) 2 8712 2677 fax

Online anytime at: polysciences.com