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Eposolder 6869

Electrically Conductive Adhesive with High Thermal Conductivity

Typical Properties			
Property	**Unit**	**Value**	**Test Method**
Color / Component		Silver	Visual
Viscosity at 25°C	cP.s	98,000	ASTM D2196
Thixtropic Index		3.0	ASTM D2196
Density	Gram /cc	3.3	ASTM D792
Weight loss in cure	Weight %	< 0.5%	TGA
Property as Cured			
Color		Silver	Visual
Hardness	Shore A	70	ASTM D2240
Modulus (25 °C)	GPa	2.1	DMA
Volume Resistivity	Ohm-cm	$< 1 \times 10^{-4}$	ASTM D257
Coefficient of Thermal Expansion	ppm/C	56 (< Tg) 147 (> Tg)	IPC-TM-650
Glass Transition Tg	℃	90	TMA
Thermal Conductivity	W/m-K	11	ASTM D5470
Adhesion (Al/Al lap shear)	Psi	> 400	ASTM D1002
Temperature Usage	℃	– 50 to 230	TGA
Cure Profile			
Recommended Cure Profile	Min	105°C 20 min followed with 150°C 20 min	DSC
Cure at 125 °C	Hrs	1	DSC
Pot / Work Life at 25°C	Days	> 10	Viscosity double
Shelf Life @ 4°C	Month	6	ITM

These figures are only intended as a guide and should not be used in preparing specifications.

Characteristics

Eposolder 6869 is an epoxy electrically conductive adhesive that has high thermal conductivity. The latent cure design of this adhesive makes it cure quickly at elevated temperature while keeping a long pot life at ambient condition. It is used in electronic packaging for low stress soldering / connecting / conducting applications such as in Sensors, Filters, Crystal Oscillators, MEMS, LCD Driver IC's, CCD chip attach, Wafer Lamination, etc. Eposolder 6869 is dispensable and printable.

Special Features and Benefits

- Superior electrical conductivity
- High thermal conductivity
- Reduced rigidity for low stress bonding
- Long pot life at room temperature
- High temperature stability
- Low bleeding, low volatile

Typical Applications

- Aerospace and Automotive electronics
- Semiconductor and Telecommunications
- Conducting while dissipating heat
- Grounding of power devices
- EMI shielding and gasketing
- Thermally conductive vibration

Processing Instruction

Eposolder 6869 is required to store in refrigerator (< 4 ℃). Before apply it, please let it thaw completely at room temperature. This typically takes about 10 min for syringes and 30 min for jars.

We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions can be obtained by contacting directly to United Adhesives Inc.

Storage

Eposolder 6869 has a shelf life of at least 6 months when stored below < 4 ℃ in the originally sealed container. The 'Best use before end' date of each batch appears on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety information

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from United Adhesives, Inc.