

## UV CURABLE CAVITY-FILL ENCAPSULANT FOR HIGH RELIABILITY IC ENCAPSULATION

EAST HANOVER, N.J. - Zymet has introduced a high reliability UV curable encapsulant for cavity-fill IC encapsulation. **UVE-1017-3** cures in as little as 3 minutes, far less time than a conventional heat cured encapsulant. The fast cure increases line speed and productivity.

**UVE-1017-3** is sensitive to 365 nm broadband radiation, otherwise known as the UV-A spectrum. Since this is the longer UV spectra, cure depths of 60-100 mils are easily achieved. Curing equipment is available from several independent vendors.

The encapsulant's viscosity is only 13,000 cps at 68°C, even lower at higher temperatures, facilitating flow and wetting. Its low thixotropy makes it a self-leveling material. Average particle size of the filler is between 10-20 microns, with a maximum particle size of 50 microns, allowing the encapsulant to flow between narrowly spaced wire bonds.

Other properties make the encapsulant suited to high reliability IC encapsulation. It has a low coefficient of thermal expansion (17.5 ppm/°C), a high glass transition temperature (145°C), excellent adhesion to organic substrates, including polyimide, and very low levels of ionic contaminants.

Zymet is a manufacturer of microelectronics adhesives and encapsulants. Its products include die attach adhesives, substrate adhesives, and underfill encapsulants. Zymet first pioneered the use of UV curing materials when it developed and introduced a series of UV curable anisotropically conductive adhesives designed for chip-on-glass assembly.

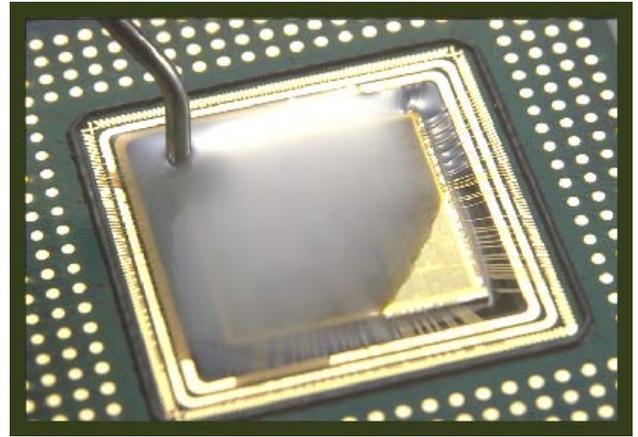


Photo: **UVE-1017-3** in BGA cavity.

As a service to its customers, the company will encapsulate parts or assemblies at its East Hanover facility and return them for evaluation and stress testing. A thixotropic version is also available for glob top applications.

For more information, contact Zymet, Inc., East Hanover, NJ. Requests for information may be submitted by Email to [info@zymet.com](mailto:info@zymet.com).

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