

FOR IMMEDIATE RELEASE

YINCAE Introduces UF 66UV: UV and Thermal Dual-Cure Underfill for Advanced Optical Packaging

(Menands, NY) July 10, 2026— YINCAE Advanced Materials is pleased to announce the launch of **UF 66UV**, a next-generation **UV and thermal dual-cure underfill** designed for advanced optoelectronic, photonic, and semiconductor packaging applications requiring exceptional optical clarity, high reliability, and room-temperature processing.

UF 66UV combines excellent flow characteristics with a unique dual-cure mechanism. The material readily flows into ultra-fine gaps at **room temperature**, enabling complete gap filling without heating and simplifying assembly of delicate optical components. After dispensing, the exposed material is rapidly immobilized by **UV curing**, followed by a **low-temperature thermal cure at only 60°C** to complete polymerization in shadowed regions and ensure long-term mechanical reliability.

One of UF 66UV's key advantages is its outstanding optical performance. The cured material exhibits **greater than 98% light transmittance** in the visible spectrum while maintaining excellent transparency and color stability throughout reliability testing.

Extensive reliability evaluations demonstrate that UF 66UV maintains its optical properties even under harsh environmental conditions. Following **Pressure Cooker Test (PCT)** exposure and **five lead-free reflow cycles at 260°C**, the material shows:

- Greater than **98% light transmittance**
- **No measurable reduction in optical transmission**
- **No visible color change or yellowing**
- Excellent adhesion and encapsulation integrity

These characteristics make UF 66UV particularly suitable for high-performance applications including:

- MicroLED displays
- CMOS image sensors
- Optical sensors
- Silicon photonics
- VCSEL and LiDAR modules
- AR/VR optical assemblies

- Medical and industrial optical devices

"Advanced optical packaging demands materials that combine fast processing, excellent optical clarity, and long-term reliability," said a YINCAE spokesperson. "UF 66UV addresses these requirements with room-temperature flow, rapid UV fixation, low-temperature thermal curing, and exceptional resistance to moisture and high-temperature reflow without compromising optical performance."

About YINCAE

YINCAE Advanced Materials develops high-performance materials for semiconductor packaging, microelectronics, optoelectronics, and advanced manufacturing. Its portfolio of underfills, encapsulants, adhesives, coatings, and specialty materials supports innovations in AI, data centers, telecommunications, silicon photonics, quantum technologies, automotive electronics, and other high-growth markets.

For more information, visit www.yincae.com or contact info@yincae.com.