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Novel Formulation Ideal for Applications that Require Low Outgassing for Fog-free Optics

Henkel's New Low-Volatility Gap Filler 3500LV Delivers Excellent Thermal Performance

Addressing the thermal requirements of next-generation product designs, Henkel Adhesive Technologies has formulated Gap Filler 3500LV, a liquid Gap Filler material that delivers high thermal conductivity and low volatility for reduced outgassing.

"The realities of miniaturization have put new demands on thermal management requirements," says Lonnie Helgeson, Henkel Gap Filler Product Manager. "Today's designs are so small and intricate that providing adequate material coverage for thermal control is challenging. The use of a liquid material that can fill tiny gaps and flow around complex architectures is critical to ensuring product functionality and reliability."

Gap Filler 3500LV is a two-part material that cures at room temperature with the option of accelerated curing through the addition of heat. While it delivers high thermal conductivity of 3.5 W/m-K and the mechanical property benefits of a silicone, it does so with minimal outgassing. As compared to competitive materials that provide higher volatiles variability, this Gap Filler's low volatile content is tightly controlled lot to lot, ensuring outgassing is kept to a minimum.

Gap Filler 3500LV is beneficial in applications that require the optics to remain free of lens fogging such as automotive headlamps, stadium lighting and high-intensity LEDs. Other applications such as industrial PLC controllers on paint lines, automotive infotainment, cameras and lighting systems also benefit from Gap Filler 3500LV's high thermal conductivity and low outgassing.

Once cured, Gap Filler 3500LV is a soft material that provides protection from shock and vibration. The liquid's ability to fill tiny gaps and voids combined with its zero



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shrinkage characteristic ensure a high-reliability thermal interface for exceptional heat management.

For more information, visit <u>www.bergquistcompany.com</u>.

Gap Filler 3500LV is registered trademark of Henkel and/or its affiliates in Germany and elsewhere.

About Henkel

Henkel operates worldwide with leading brands and technologies in three business units: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions, both in the consumer and in the industrial businesses, with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 50,000 people and reported sales of 16.4 billion euros and adjusted operating profit of 2.6 billion euros in fiscal 2014. Henkel's preferred shares are listed in the German stock index DAX.

Photo material is available at http://www.henkel.com/press

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The following material is available:

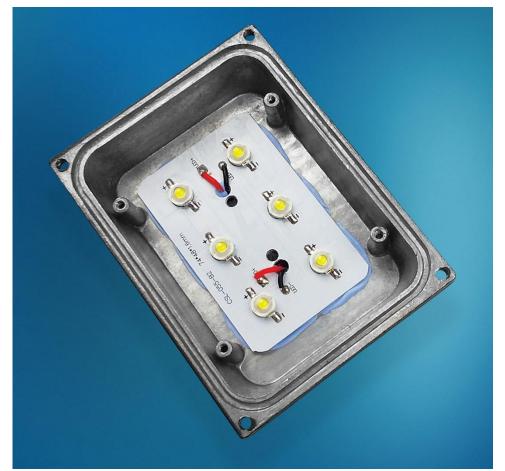


Figure 1: Gap Filler 3500LV offers high thermal conductivity and the ability to flow around complex architectures.