



Press Release

March 19, 2025

New silicone-free gel protects high performing ADAS components from thermal degradation

Henkel launches Bergquist Liqui Form TLF 6500 CGel-SF: Advanced heat dissipation for the age of autonomous driving

Düsseldorf – With the rapid development of advanced driver assistance systems (ADAS) in the pursuit of autonomous driving, greater focus is being placed on the reliability of the ADAS domain controllers that enable real time decision-making. As ADAS systems process higher volumes of sensor and vehicle data at higher speeds, effective heat management will become critical to ensure the performance, reliability, and longevity of these components.

To anticipate this challenge, Henkel has developed Bergquist Liqui Form TLF 6500 CGel-SF, an upgraded thermal curable gel designed to push the envelope of ADAS applications. By delivering a higher level of conductivity it works to prevent performance degradation and protect sensitive electronic assemblies.

Bergquist Liqui Form TLF 6500 CGel-SF is a new thermal management material with a conductivity of 6.5W/(m·K). With its lasting reliability, easier handling and optimal sustainability it meets growing demand for superior heat dissipation solutions to protect ADAS components and vehicle computing units from heat degradation and damage.

“As safety standards and OEM and driver expectations evolve, ADAS systems are becoming ever more sophisticated. This makes it vital to effectively manage the heat generated by domain controllers to ensure their long-term reliability. Our top OEM partners, for example, are launching a high-intelligence vehicle platform which needs to process up to 4.5 terabytes of data per hour. This fivefold increase of data generates high heat concentration, requiring more effective thermal solutions to avoid component failure,” explains Nancy Yang, Business Development Manager for Automotive Electronics North America at Henkel. “Additionally, the sensitive and fragile nature of these components requires a solution that can be applied with low stress to avoid damage. As part of Henkel’s upgraded range of thermal management

materials, Bergquist Liqui Form TLF 6500 CGel-SF has been specifically engineered to address this breadth of challenges.”

Bergquist Liqui Form TLF 6500 CGel-SF is a one-part, silicone free, easy-to-dispense thermal curable gel. With an exceptional conductivity rating of up to 6.5W/(m·K), the gel delivers superior heat dissipation for components managing heavy data loads. As a cured elastomer, it offers ultra-low compression stress to protect fragile assemblies and sensitive electronic components and effectively fills air voids and irregular gaps to ensure even heat transfer across the surface.

The new product has been designed to enhance production efficiency. It can be dispensed at high speed to match with just in time manufacture processing. Meanwhile, Bergquist Liqui Form TLF 6500 CGel-SF provides excellent reliability and avoids any cracking or thermal failure during thermal cycling and therefore effectively expands component lifespan.

Bergquist Liqui Form TLF 6500 CGel-SF has been designed in alignment with Henkel’s goals for sustainability. It is a low VOC product which is D4-D10-free. It protects operators at the production line as well as avoids any fogging issues for components with lenses such as cameras. It is an extremely low oil bleeding thermal solution which suits applications for sensitive components including radar/lidar.

About Henkel

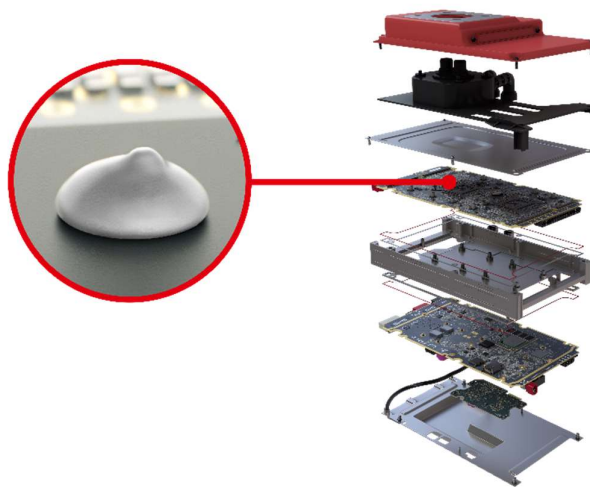
With its brands, innovations and technologies, Henkel holds leading market positions worldwide in the industrial and consumer businesses. The business unit Adhesive Technologies is the global leader in the market for adhesives, sealants and functional coatings. With Consumer Brands, the company holds leading positions especially in laundry & home care and hair in many markets and categories around the world. The company’s three strongest brands are Loctite, Persil and Schwarzkopf. In fiscal 2024, Henkel reported sales of more than 21.6 billion euros and adjusted operating profit of around 3.1 billion euros. Henkel’s preferred shares are listed in the German stock index DAX. Sustainability has a long tradition at Henkel, and the company has a clear sustainability strategy with specific targets. Henkel was founded in 1876 and today employs a diverse team of about 47,000 people worldwide – united by a strong corporate culture, shared values and a common purpose: “Pioneers at heart for the good of generations.” More information at www.henkel.com

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

Contact: Sebastian Hinz
Tel.: +49 211 797 85 94
Email: sebastian.hinz@henkel.com

Henkel AG & Co. KGaA

The following photo material is available:



Bergquist Liqui Form TLF 6500CGel-SF, thermal cure gel applied on the ADAS Domain Controller.