



## Press Release

February 4, 2019

Materials Offer Unique Combination of High Thermal Conductivity and Low Assembly Stress

### Henkel Expands BERGQUIST® GAP PAD® Portfolio with New Ultra-Low Modulus Thermal Interface Materials

Irvine, CA – Henkel Corporation today announced the addition of two ultra-low modulus BERGQUIST® GAP PAD® thermal interface materials (TIMs) to its award-winning line of high compliance thermal management products. BERGQUIST GAP PAD TGP 6000ULM and BERGQUIST GAP PAD TGP 7000ULM have been formulated with an advanced resin platform to deliver ultra-low modulus capabilities and high thermal conductivity of 6.0 W/m-K and 7.0 W/m-K, respectively.

“As densities increase with electronics miniaturization, maximizing heat dissipation while minimizing assembly stress on delicate components is challenging but essential for reliability,” says Danny Leong, Henkel Global Technology Manager, Thermal Products. “Our new ultra-low modulus TIMs provide this unique performance combination in custom-sized pads with easy handling to enhance process efficiency.”

BERGQUIST GAP PAD TGP 6000ULM and BERGQUIST GAP PAD TGP 7000ULM are very soft pads with high conformability to rough or irregular surfaces, effectively filling intricate gaps and allowing for thorough wet out at the interface for maximum thermal transfer. Historically, marrying ultra-low modulus (Shore 000, ASTM D2240) properties with high thermal conductivity has been challenging at best. However, due to the advanced silicone-based resin formulation and filler package, the new BERGQUIST GAP PADS provide exceptionally low assembly stress alongside high thermal control.

Ideal for telecom and datacom applications such as high-end routers, switches, servers and base band units, the ultra-low modulus TIMs also deliver on manufacturers’ processability requirements. Easy-to-use, BERGQUIST GAP PAD TGP 6000ULM and BERGQUIST GAP PAD TGP 7000ULM are naturally tacky on

both sides. BERGQUIST GAP PAD TGP 6000ULM integrates fiberglass support with one side offering minimal tack for simple handling and rework. BERGQUIST GAP PAD TGP 7000ULM is supplied without fiberglass support and similar tackiness levels on both sides of the pad. Available in custom-cut shapes and sizes with top- and bottom-side protective liners, the ultra-low modulus BERGQUIST GAP PADs are ready for immediate use upon receipt and can be stored at room temperature.

Samples of the new BERGQUIST GAP PADs are available upon request. For more information about the latest materials or any of Henkel's thermal management solutions, visit [www.henkel-adhesives.com/thermal](http://www.henkel-adhesives.com/thermal) or call 1-800-347-4572.

### **About Henkel in North America**

Henkel operates across its three business units – Adhesive Technologies, Beauty Care and Laundry & Home Care – in North America. Its portfolio of well-known consumer and industrial brands includes Schwarzkopf® hair care, Dial® soaps, Right Guard® antiperspirants, professional hair care brand Sexy Hair®, Persil®, Purex® and all® laundry detergents, Snuggle® fabric softeners as well as Loctite®, Technomelt® and Bonderite® adhesives. North America is an important region for Henkel: With sales of around 5.8 billion US dollars (5.2 billion euros) in 2017, North America accounts for 26 percent of the company's global sales. Henkel employs more than 9,000 people across the U.S., Canada and Puerto Rico. For more information, please visit [www.henkel-northamerica.com](http://www.henkel-northamerica.com).

### **About Henkel**

Henkel operates globally with a well-balanced and diversified portfolio. The company holds leading positions with its three business units in both industrial and consumer businesses thanks to strong brands, innovations and technologies. Henkel Adhesive Technologies is the global leader in the adhesives market – across all industry segments worldwide. In its Laundry & Home Care and Beauty Care businesses, Henkel holds leading positions in many markets and categories around the world. Founded in 1876, Henkel looks back on more than 140 years of success. In 2017, Henkel reported sales of 22.6 billion US dollars (20 billion euros) and adjusted operating profit of around 3.9 billion US dollars (3.5 billion euros). Combined sales of the respective top brands of the three business units – Loctite, Schwarzkopf and Persil – amounted to 7.2 billion US dollars (6.4 billion euros). Henkel employs more than 53,000 people globally – a passionate and highly diverse team, united by a strong company culture, a common purpose to create sustainable value, and shared values. As a recognized leader in sustainability, Henkel holds top positions in many international indices and rankings. Henkel's preferred shares are listed in the German stock index DAX. For more information, please visit [www.henkel.com](http://www.henkel.com).

Photo material is available at [www.henkel-northamerica.com/press](http://www.henkel-northamerica.com/press)

Contact     Juan Serrano  
Phone        +1 .714.782.7282  
Email        [juan.serrano@henkel.com](mailto:juan.serrano@henkel.com)