



Press Release

October 2, 2018

New, Thicker Material Supports UL Reinforced Insulation and IEC Class II Insulation Standards, Delivers Excellent Thermal and Adhesion Performance

Henkel Expands BERGQUIST® BOND-PLY® LMS-HD Portfolio with Addition of Reinforced Insulation Material

Irvine, CA – Upholding its commitment to enable customers' 2020 requirements and beyond, Henkel has developed a new, thicker version of its BERGQUIST® BOND-PLY® LMS-HD thermally conductive laminate material. The latest BERGQUIST BOND-PLY LMS-HD is a 0.018" thick thermal adhesive that complies with the Underwriter's Laboratories (UL) standard for reinforced insulation as well as IEC Class II insulation standards.* This allows designers and manufacturers of power applications with stringent insulation requirements to take advantage of the benefits of BERGQUIST BOND-PLY LMS-HD, or to future-proof products that may not currently fall under this UL regulation but could be subjected to its implementation in the near future.

As compared to other materials in the portfolio, the new BERGQUIST BOND-PLY LMS-HD provides a higher standoff between the device and heat sink for reinforced insulation and maintains all of the high-performance properties of the standard thickness version. The material is a heat-curable formulation that delivers excellent thermal performance of 1.4 W/m-K and strong adhesion, eliminating the need for mechanical fasteners such as screws or clips. With a low modulus, silicone-based BERGQUIST BOND-PLY LMS-HD effectively absorbs mechanical stresses common with assembly-level coefficient of thermal expansion (CTE) mismatches, and also provides robust protection against shock and vibration.

"Any power application with critical insulation requirements, or that may need to comply with anticipated UL safety standards will benefit from the new BERGQUIST BOND-PLY material," says Justin Kolbe, Global Market Segment Manager, Power and Industrial Automation, Henkel Corporation. "By incorporating thermally-

conductive laminate material that meets reinforced insulation standards into current product designs, manufacturers can expand target markets and help customers save valuable time and resource; electronic devices produced today will adhere to future standards should they be implemented in emerging sectors where safety agency requirements have not yet been clearly defined.”

Henkel's 0.018" thick BERGQUIST BOND-PLY LMS-HD is ideal for a variety of power component to heat sink applications where excellent dielectric performance, adhesive strength over a wide continuous use temperature range and thicker reinforcement are required. For more information, visit www.henkel-adhesives.com/electronics or call +1-952-835-2322.

**Agency approval must be tested and verified on a case-by-case basis.*

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.

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.

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

Contact Doug Dixon
Phone +1 714-368-8068
Email doug.dixon@henkel.com