



## Press Release

May 15, 2018

High Performance and Broad Effectiveness for Multiple PV Applications

# Henkel's Novel Electrically Conductive Adhesive Technology Designed for Next-Generation Solar Device Assembly

Irvine, CA – Leveraging its formulation leadership in electrically conductive adhesive (ECA) innovation, Henkel Adhesive Electronics has developed a series of ECAs designed to facilitate lower-cost, flexible, process-friendly assembly of solar devices. The LOCTITE® ABLESTIK® ICP 8000 series ECAs have been designed to elevate module performance and accommodate various assembly processes including shingled solar modules and cell interconnect ribbon bonding.

“More challenging solar cell processing due to thinner wafers and emerging new cell designs has illuminated the need for an evolution in electrical interconnect materials,” comments Jon Burke, Henkel Market Segment Manager for Solar. “This in combination with the cost pressures facing solar technology manufacturers, as well as the requirement for increased module output, has driven the development of Henkel’s latest line of next-generation electrically conductive adhesives.”

LOCTITE ABLESTIK ICP 8000 is a series of ECAs designed specifically for the demands of solar cell interconnect and in-use module performance. With a very low cost per watt, the new Henkel ECAs are among the most economical materials on the market. The formulations also offer exceptional processing and performance characteristics, including compatibility with wafer thicknesses of less than 160 µm; fast printing and dispensing capability at speeds of greater than 200 mm per second for high throughput; and full curing in less than 20 seconds at low temperatures between 110°C and 150°C, allowing maximum UPH and improving in-line inspection and yields.

“Not only are there processing advantages with LOCTITE ABLESTIK ICP 8000 electrically conductive adhesives, but in-use reliability and performance benefits as well,” notes Burke. “For both shingle stacking and ribbon bonding cell interconnect techniques, the new Henkel materials offer a more flexible solution than solder, absorbing the stress associated with CTE mismatches for improved reliability.”

With a broad technical support footprint, advanced R&D labs and material production in all major geographical regions, and experienced solar applications specialists around the world, Henkel's PV technical consultation resources are unmatched. PV specialists interested in learning more about LOCTITE ABLESTIK ICP 8000 series ECAs and the company's complete engineering services are invited to visit the Henkel technical team in Booth 250, Hall W4 at the upcoming SNEC PV Power Expo, taking place May 27 – 30 in Shanghai, China. For additional information regarding Henkel's solar portfolio, send an e-mail to [jon.burke@henkel.com](mailto:jon.burke@henkel.com) or call +1-408-813-9568.

#### **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)

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