

Press Release

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Loctite GC 10

Henkel Develops Market's First-Ever Temperature Stable Solder Paste

In a major materials development breakthrough that is set to change current solder paste processing performance and cost paradigms, Henkel announces the launch of the first-ever temperature stable solder paste material. The game-changing formulation, Loctite GC 10, is temperature stable at 26.5°C for one year and stable at temperatures of up to 40°C for one month, which affords exceptional performance throughout the logistics and operations chain – from shipping/receiving to printing and reflow. From Hall 6, Booth #105 at the upcoming SMT trade show, set to take place in Nuremberg, Germany on May 5 till 7, Henkel will showcase the first of its kind temperature stable solder paste material.

“Truly, this is the most exciting thing that’s happened in solder materials development in decades,” says Dr. Mark Currie, Henkel Global Product Manager for Solder Materials. “A material that has temperature stability from shipping all the way through to final assembly is a remarkable achievement.”

In process, Loctite GC 10 offers significant improvements over conventional solder paste materials. As compared to traditional materials which average abandon times ranging from 1 to 4 hours, the halogen-free, lead-free, temperature-stable Henkel formula enables abandon times of up to 24 hours and has a startup time of zero. Stabilized and consistent print transfer efficiency, an expanded reflow window and increased activity for better results with soak temperatures between 150°C and 200°C, make Loctite GC 10 incomparable among other paste materials. The solder system’s stability on the line allows for significant cost savings with on-line paste utilization of more than 95%. The reductions in solder-related defects achieved with Loctite GC 10’s process performance result in higher yields and improved profitability.



Not only will manufacturers realize process improvements and cost reductions due to Loctite GC 10's unmatched performance, but will also experience resolution to long-standing logistics and storage challenges. The temperature stability of the product eliminates the requirement for cold packing, overnight shipping and refrigerated storage. Packaging and shipping costs are reduced and energy consumption within the factory is decreased.

Having been trialed at numerous customers worldwide, the results of the material's performance indicate future commercial success with widespread integration into electronics manufacturing operations worldwide. "The improved performance, higher yields and better profitability customers will achieve from this breakthrough material are substantial," explains Currie. "Loctite GC 10 sets a new standard for high-performance solder materials."

Expertise Shared at the Exhibitor Forum

Not only will Henkel provide in-depth information regarding its new temperature stable solder paste material at the Henkel exhibit, but key members of the company's technology team will also share their expertise at the Exhibitor Forum, where two presentations highlight the significance of the latest materials advances. Sharona Sente, Associate Technical Service Engineer, will present a paper entitled "Highly Conductive, Flexible Silver Inks for Printed Electronics" that delves even further into the benefits of the new Loctite ECI 1010 and Loctite ECI 1011 materials. Visitors can attend Ms. Sente's presentation on Tuesday, May 5, at 3:40 p.m. in the SMT Forum. The following day at 12:40 p.m. Ian Wilding, Henkel's Director of Product Development for Solder Materials, will present on the "Game Changing Room Temperature Stable Solder Paste" and highlight the product features and technical challenges.

Finally, SMT provides the perfect venue at which to showcase the latest addition to the Henkel portfolio: Bergquist thermal management materials. Acquired by Henkel in 2014, The Bergquist Company is arguably the global leader in thermal materials and substrates. During the show, visitors can talk to thermal specialists about Thermal Clad® insulated metal substrates and liquid dispensed gap fillers, materials that have been specifically designed to deliver optimum cooling and reliable performance for power devices.

To schedule an appointment with Henkel during SMT, send an e-mail to jeroen.verlinden@henkel.com.

For more information, visit our website www.soldergamechanger.com.

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Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions both in the consumer and industrial businesses with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs almost 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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Henkel AG & Co. KGaA

The following material is available:



In process, Loctite GC 10 offers significant improvements over conventional solder paste materials, such as higher abandon times and a startup time of zero.



Loctite GC 10 is the market's first-ever temperature stable solder paste.



The game-changing formulation is temperature stable at 26.5°C for one year and stable at temperatures of up to 40°C for one month.