

Press Release

2016/09/13

A Broad Range of Electronic Materials Solutions Deliver Benefits for Multiple **Applications**

Henkel's Productronica India Exhibit to Highlight **New Thermally Conductive Technomelt Material,** Thermal Management Innovations, Novel Inks and Structural Adhesives for Display Applications

At the upcoming Productronica India 2016 event, which is now co-located with Electronica India in Bangalore, Henkel Adhesive Electronics will showcase a brand new, thermally conductive Technomelt material along with electronic inks for multiple applications, thermal management products and a portfolio of structural adhesives for modern display technologies.

Low Pressure Molding with Thermal Conductivity

From September 21 – 23, Productronica India show delegates are invited to visit the Henkel technical team in stand #3155 to learn about the company's latest innovation, Technomelt TC 50. New to the award-winning Technomelt portfolio, this novel material delivers the simple processing and protective properties of all Technomelt hot melt adhesives, and adds thermally conductive functional capabilities. three simple steps - insert Technomelt material, mold and test --- a self-enclosed electronics assembly is produced in a low-pressure process, accommodating for delicate circuitry and today's fine-pitch devices. Technomelt TC 50 provides the added benefit of heat dissipation through the encapsulating layer with thermal conductivity of >0.5 W/m-K, making it an ideal dual-function solution for applications such as LEDs drivers, automotive power systems and micro solar inverters. (www.technomelt-simply3.com.)

Next-Generation Printed Electronic Inks

Henkel's market leadership in electrically conductive ink technologies is wellestablished and the innovation progress continues with its latest advances: Loctite ECI 8000 series positive temperature coefficient (PTC) inks and Loctite ECI 7000 series force sensitive resistor (FSR) inks. The line of PTC inks provide performance benefits for applications where fast and uniform heating is required.





Henkel's Loctite ECI 8000 PTC inks include a variety of formulations to allow for specific switch off temperatures without the use of electronic control units. This allows heating to a specific set point, which is then maintained at a constant level. There is no risk of overheating and the materials are exceptionally thin for compatibility with very tight spaces.

FSR inks enable varying and controllable ranges of electrical resistance aligned to the required sensitivity level of the application. The new suite of Loctite ECI 7000 series FSR materials allow product responses based on changing levels of force, as opposed to simply responding to force in general. Different intensities of force alter the material's conductivity, therefore controlling the device response for applications such as medical diagnostic systems, computer touch pads, and music and entertainment devices, among others. (www.henkel-adhesives.com/conductive-inks-coatings-27433.htm)

Advanced Thermal Management Solutions

Also on show in the Henkel stand during Productronica India 2016 will be high performance Bergquist brand thermal management materials. A complete suite of thermal interface solutions, both in pad and liquid dispensed formats, allows manufacturers to select the medium and thermal conductivity required to comply with specific application requirements.

Visitors to the Henkel booth can learn more about award-winning Gap Pad thermal interface materials, which deliver excellent conformability, low stress and effective thermal control. For processes that require automated, high-volume solutions in addition challenging architecture accommodation, Henkel's Gap Filler materials provide superior thermal conductivity and ultra-conforming properties. Gap Filler thermal products are well-suited for fragile, low-stress applications including power electronics and discrete devices. (www.henkel-adhesives.com/thermal)

Additional technical detail on thermal management strategies will be shared during a presentation by Henkel Business Development Manager, Holger Schuh, on September 22 at 4:40 p.m. as part of the Session 3 Quality and Reliability conference track.

Structural Adhesives for Display Technologies

Henkel's full portfolio of structural and hot melt adhesives for various display and peripheral applications will be featured in Henkel booth #3155 throughout the three-day event. Adhesives for cover glass assembly to eliminate mechanical techniques, as well as formulations to facilitate bezel and battery cover bonding are among the many enabling display technologies from Henkel. (www.loctite.com/hhdd)

For more information, visit <u>www.henkel-adhesives.com/electronics</u>. To schedule an appointment with a Henkel team member during Productronica India 2016, send an e-mail to <u>ponpandian.rajaram@henkel.com</u>.

Loctite and Technomelt are registered trademarks of Henkel and/or its affiliates in Germany and elsewhere.

Henkel operates worldwide with leading brands and technologies in three business units: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions, both in the consumer and in the industrial businesses, with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 50,000 people and reported sales of 18.1 billion euros and adjusted operating profit of 2.9 billion euros in fiscal 2015. Henkel's preferred shares are listed in the German stock index DAX.

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

Contact Holger Elfes

Phone +49 211 797-99 33 E-mail holger.elfes@henkel.com

Henkel AG & Co. KGaA

The following material is available: