



Press Release

April 11, 2023

Henkel presents comprehensive range of adhesives, coatings and thermal management solutions for EV battery systems

Creating the safer sustainable batteries of tomorrow – Meet Henkel at the Battery Show Europe 2023

Düsseldorf – As a global leader in automotive adhesives, sealants, thermal materials and functional coatings, Henkel Adhesive Technologies is proud to be returning to the Battery Show Europe – held in Stuttgart, Germany from May 23-25. Visitors to the Henkel booth (Hall 10, Stand G10) can learn more about leading-edge battery safety materials, thermal interface materials, adhesives and sealants, dielectric coatings, and conductive electrode coatings. As well as presenting solutions for the manufacture of safer, longer-lasting and higher performing batteries, Henkel is focusing improving sustainability, through debondable adhesives that facilitate repair, re-use and recyclability. In addition to meeting and learning from Henkel experts at the booth, and during a live product showcase, Henkel will be participating in the Battery Show Conference: Dr. Keon Lee, Henkel's global expert on EV battery systems, innovation and product development will be hosting a session on using advanced materials in the design of safer batteries.

"A fundamental understanding of EV battery thermal runaways and the main triggers behind them is essential for creating and implementing the best solutions to tackle them", says Dr. Keon Lee, Battery Expert and Senior Manager Product Development at Henkel. "I am excited to speak at the Battery Show Europe Conference this year where I will be sharing many insights about Henkel's journey to enable EV passenger safety with advanced materials."

Battery safety and thermal propagation prevention

Helping OEMs and battery manufacturers develop safer batteries is a key focus area for Henkel, which is innovating new materials and solutions to support this critical requirement. Thermal propagation prevention materials are vital in protecting the EV passengers from the risk of fire

LOCTITE TECHNOMELT BONDERITE TEROSON AQUENCE

Ceresit



and providing sufficient time to exit a vehicle in the case of fire. Henkel's battery safety materials include fire protection pads, fire protection coatings and potting materials.

Thermal interface materials

Thermal management is a key enabler for efficient and safe battery systems. This remains just as critical in both conventional cell-to-module designs and the latest cell-to-pack designs. To support OEMs and battery manufacturers' take on this challenge, Henkel has developed a comprehensive and innovative portfolio of thermal interface materials that includes thermal gap fillers, thermally conductive adhesives and thermal gap pads that are suitable for all different types of battery designs and configurations.

Adhesives and sealants

Advanced adhesives are vital for efficient manufacture of battery packs and modules that can meet the rigorous stresses of automotive applications. They are also the key to greater sustainability by facilitating repairs and serviceability. Henkel is meeting these demands with its wide range of structural adhesives for bonding elements of the battery pack housing, semi-structural adhesives to assemble cells to the module, adhesives for battery cell assembly, as well as serviceable gasketing materials which seal and protect the battery pack but also allow for reopening for second life applications and recycling.

Dielectric coatings

Henkel will showcase its range of dielectric coatings. Typically applied at the outer surface of the battery cell case as a replacement for PET-foil, these enable fast UV light curing at room temperature while delivering high dielectric strength and structural performance. Thanks to Henkel's comprehensive approach to creating automotive solutions, the coatings have been designed to ensure high compatibility with Henkel's thermal and structural adhesives.

Conductive electrode coatings

To improve the overall lifetime performance and range of the battery, Henkel offers conductive electrode coatings. Applied to the inside of the battery cell, they reduce the internal electrical resistance of the cell and increase the adhesion of the active material to the electrodes for both lithium iron phosphate (LFP) and lithium nickel manganese cobalt (NMC) battery cells.

Hear directly from Henkel experts

As the focal point for Europe's battery value chain, the Battery Show Conference provides an unmissable opportunity to hear industry thought leaders share their insights into current best practices and the innovations that will transform tomorrow. On May 24, Henkel will be part of the conference's "Battery Design and Management" track. Dr. Keon Lee, Henkel's global expert

on battery systems, innovation and product development will host a session entitled “How to test and design a safe battery system with advanced materials?”

“The Henkel E-Mobility team is proud to be helping our customers with our know-how on reliable and cost-efficient large-scale manufacturing with performance-driven and high-impact solutions. This year at the Battery Show Europe, we are very happy to meet our customers to showcase Henkel’s comprehensive solution portfolio for different EV battery designs. This will include our latest exciting innovations for new cell-to-pack designs with our thermally conductive adhesives, dielectric coatings and debondable adhesives for example”, says Frank Kerstan, Head of E-Mobility Europe at Henkel.

Henkel will also be hosting a special “live product showcase” at the booth on 24 May at 11.00 am which will present the company’s latest innovations and solutions for EV battery systems.

About Henkel

With its brands, innovations and technologies, Henkel holds leading market positions worldwide in the industrial and consumer businesses. The business unit Adhesive Technologies is the global leader in the market of adhesives, sealants and functional coatings. With Consumer Brands, the company holds leading positions especially in hair care and laundry & home care in many markets and categories around the world. The company’s three strongest brands are Loctite, Persil and Schwarzkopf. In fiscal 2022, Henkel reported sales of more than 22 billion euros and adjusted operating profit of around 2.3 billion euros. Henkel’s preferred shares are listed in the German stock index DAX. Sustainability has a long tradition at Henkel, and the company has a clear sustainability strategy with concrete targets. Henkel was founded in 1876 and today employs a diverse team of more than 50,000 people worldwide – united by a strong corporate culture, shared values and a common purpose: “Pioneers at heart for the good of generations.” More information at www.henkel.com

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

Contact Karim Sorour
Email karim.sorour@henkel.com

Vincent Zimmermann
Henkel.adhesive-technologies@emanatepr.com

Henkel AG & Co. KGaA

The following photo material is available:



Henkel presents comprehensive range of adhesives, coatings and thermal management solutions for EV battery systems at the Battery Show Europe 2023.