



Press Release

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New Loctite automotive potting solutions ensure outstanding protection from transmission fluids, thermal shocks

Going the distance: Advanced automotive potting solutions from Henkel maintain electronic components' performance, durability, and longevity

Düsseldorf – As connected vehicles and autonomous driving functions become increasingly important to the driving experience, the reliability, durability, and performance of the underlying electronic components is fundamental. To ensure this, Henkel has further expanded its portfolio of dedicated potting adhesives, with three new products to protect vital components including ECU connectors, sensors and e-motors. The dedicated solutions have been tailored to meet specific challenges: Protecting sensitive components from moisture exposure and common automotive fluid ingress is key.

Henkel is launching two new one-component potting sealants with silicone-based Loctite SI 5035 and polyacrylate-based Loctite AA 5832. The third new sealant solution is two-component based Loctite PE 8086 AB which combines thermal management with physical protection. These potting products are designed for seamless integration into the manufacturing process and optimal compatibility with the materials used in automotive applications. They enable more efficient encapsulation and protection of components.

“As a leader in adhesives, sealants, and functional coatings for the automotive industry, Henkel is meeting the evolving challenges of automotive electronics with a comprehensive range of potting solutions,” says Arthur Ackermann, Business Development Manager Auto Electronics North America at Henkel. “Utilizing our strong expertise and innovation capabilities, these new products have been developed in collaboration with our customers and partners to surpass industry expectations. They not only enable high efficiency, high-accuracy manufacturing but also ensure the durability, longevity, and dependability of components over the vehicle’s lifecycle,”

Protecting against common moisture and fluid exposure – Loctite SI 5035

Loctite SI 5035 is a one-part silicone potting sealant that provides corrosion-free potting to sensitive components such as ECU connectors. As flowable sealant, it offers the advantage of deep light cure capability, ultraviolet and visible, combined with a secondary moisture cure mechanism for shadow curing. Loctite SI 5035 forms a medium strength, flexible rubber sealant that can withstand high pressure testing immediately after UV curing. The fast processing and excellent adhesion characteristics reduce the resource and space requirements on the manufacturing line. The UV cure system eliminates the need for energy intensive ovens common with typical heat cure systems. The fast depth of cure reduces the need for staging parts usually required with standard RTV silicones, significantly reducing process footprint on the plant floor.

An effective shield against transmission fluid and oil – Loctite AA 5832

Loctite AA 5832 is a dual cure (UV/moisture) polyacrylate potting sealant that is designed for high-performance in sealing against automatic transmission fluids and oil. This one-component, low-viscosity material is used for potting and sealing various automotive and electronic components such as ECU connectors, mechatronics, ADAS components, which increases their reliability in harsh automotive environments. Loctite AA 5832 also helps to reduce the equipment and manufacturing footprint which saves production space. It is cured via UV light which in turn enables a lower energy consumption.

Enhancing thermal efficiency for peak performance – Loctite PE 8086 AB

Loctite PE 8086 AB is a thermally conductive potting material specially designed for encapsulation and protection of electronics components such as motor stators, actuators, transformer coils and transmission actuators from thermal shock. This two-component epoxy material offers high thermal conductivity, low mixed viscosity for easy processing, excellent electrical insulation at high and room temperatures, and Automatic Transmission Fluid (ATF) oil resistance. Loctite PE 8086 AB maintains optimal operating temperatures to ensure peak performance and mitigates long term performance degradation due to high temperatures, while protecting components from environmental factors, contaminants, and mechanical stress. As a solvent free product that produces no VOCs during the curing process, it enables more sustainable manufacturing. Loctite PE 8086 AB mitigates resource consumption as it uses less abrasive materials, thereby reducing equipment wear and facilitating lower maintenance requirements.

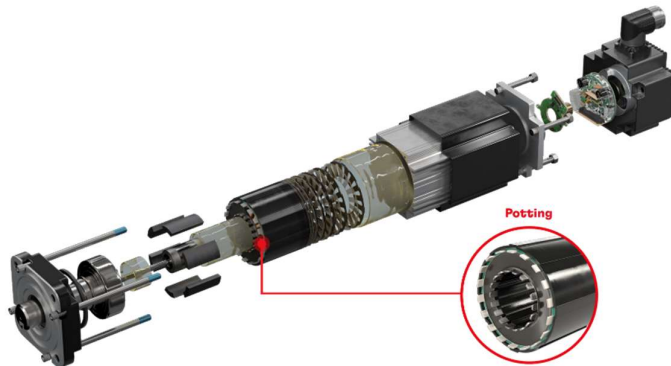
About Henkel

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 for adhesives, sealants and functional coatings. With Consumer Brands, the company holds leading positions especially in laundry & home care and hair in many markets and categories around the world. The company's three strongest brands are Loctite, Persil and Schwarzkopf. In fiscal 2023, Henkel reported sales of more than 21.5 billion euros and adjusted operating profit of around 2.6 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 specific targets. Henkel was founded in 1876 and today employs a diverse team of about 48,000 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

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