



Press Release

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First water-based flow coatable threadlocker for high-speed, sustainable automotive applications

Henkel launches Loctite DRI 2250-W

Düsseldorf – Automotive applications present some of the biggest challenges for manufacturers. Day after day, year after year, screws and fasteners must take on the toughest environments and withstand vibrations without coming loose or compromising safety. This is where Loctite threadlocker coatings excel.

Now, Henkel has introduced a breakthrough product to its comprehensive range of automotive pre-applied threadlocker coatings that brings the high-speed throughput of a flowable product with the sustainability advantages of a water-based material. The first ever water-based flowable pre-applied threadlocker, Loctite DRI 2250-W, is a medium to high strength pre-applied threadlocker that has been created to meet automotive specification requirements.

“Unlike competitor products that use toluene and other solvents, Loctite DRI 2250-W enables high speed throughput similar to solvents but is water-based,” explains Rainer Schoenfeld, Global Market Strategy Director for Exterior, Powertrain, Interior and Chassis at Henkel. “This provides automotive OEMs and suppliers with a sustainable and more environmentally friendly choice that doesn’t compromise on performance.”

Loctite DRI 2250-W offers high temperature resistance of over 200°C and has excellent chemical resistance. Scott Simmons, Business Development Manager, North America, describes how its superior High Temperature Resistance addresses customers’ frustrations with competing products: “Traditional products fail to maintain room temperature (RT) breakloose strength and can typically lose around 50 percent – and in some cases even more – of their strength at 150°C. By contrast, DRI 2250-W maintains RT strength beyond 150°C and in most cases can achieve this up to 200°C.”

Further advantages of Loctite DRI 2250-W include its low coefficient of friction. Tested on multiple plating surfaces, the material maintains a coefficient of friction between 0.10 – 0.16. It also shows superior performance on all plating types, including the newer zinc-flake coating, with added lubricity.

As a pre-applied film, the threadlocker is dry-to-the-touch and remains an inert coating until assembly. During assembly, microcapsules contained within the coating are crushed and release an active ingredient that initiates the anaerobic curing process. When cured, Loctite DRI 2250-W also acts as a thread sealant as well as a threadlocker. It eliminates the need to apply liquid sealants, adhesives, or any other mechanical locking or sealing device to threaded parts during manual or automatic assembly and is flow coatable for higher output speeds.

Areas of applications throughout the vehicle

- Transmission, gearbox, PTU – gearbox and transmission fasteners; oil pan & side cover fasteners
- Differential / axle – case and cover fasteners
- Engine – oil pan and cover fasteners – any critical fastener application
- Others – seat fasteners; electronic fasteners – M2 and smaller; any critical fastener subject to high vibration to prevent loosening.

Case study – delivering better fastener performance for automotive seating

Loctite DRI 2250-W has already proved its capabilities in a production environment with a major seat manufacturer. The company demanded a high level of fastener integrity during lifecycle testing but was experiencing inconsistent results with critical fasteners due to variances in the supply chain. Hence, they sought a pre-applied threadlocker that could overcome these inconsistencies, while also being able to work on contaminated zinc-flake plated fasteners.

Henkel's Loctite DRI 2250-W was the ideal solution. This high performance pre-applied threadlocker performs equally well on all fastener types including stainless steel and zinc-flake plated fasteners – and critically works effectively on both clean and contaminated fasteners. It demonstrated consistent bolt clamp load across a broad service temperature range and high vibration loading, while also providing excellent performance with good serviceability across many different fastener sizes.

A sustainable choice

As with the rest of Henkel's threadlocker coating range, Loctite DRI 2250-W is a water-based product that ensures that manufacturing, application, drying, and assembly processes are environmentally sustainable. Its water-based chemistry contains no solvents or halogen. By coating components such as screws or fasteners with Loctite pre-applied threadlockers, they can be reused after disassembly by applying the appropriate liquid Loctite threadlocking or thread sealing product.

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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 2021, Henkel reported sales of more than 20 billion euros. The company employs about 53,000 people globally – a passionate and highly diverse team, united by a strong company culture, a common purpose, 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.

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

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