

Americhem Launches EcoLube™ MD PFAS-Free Internally Lubricated Compounds for Healthcare Applications

Cuyahoga Falls, Ohio (January 29, 2025) - Americhem, Inc., a globally recognized designer and manufacturer of custom color masterbatch, functional additives, engineered compounds, and performance technologies, has launched the EcoLube™ MD line of PFAS-free internally lubricated compounds specifically for medical devices and other healthcare applications.

Building on the success of Americhem's launch of EcoLube™ in 2024, EcoLube™ MD offers significant advantages for healthcare applications. As a sustainable, non-PFAS solution, EcoLube™ MD addresses the critical need for effective wear and friction reduction. It ensures compliance with current and future regulations, demonstrates environmental stewardship, and reduces environmental impact.

EcoLube™ MD pre-lubricated engineered compounds and alloys are designed to help manufacturers reduce the wear and friction of moving plastic parts, reduce noise during use, and decrease the coefficient of friction for plastic-on-plastic and plastic-on-metal applications, all without the use of PFAS components. End-use applications can include minimally invasive surgical devices, syringe pumps, prosthetics, surgical robots, and more.

Matt Miklos, Vice President/General Manager of Americhem's engineered compounds division, noted that healthcare OEMs are increasingly concerned about sustainability and ensuring that new products meet current and future regulations.

"With regulations around the world potentially restricting or banning the use of PFAS and PTFE, healthcare OEMs are challenged with finding alternatives that can match their self-lubricating performance," said Miklos. "Our new PFAS-free

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EcoLube™ MD line showcases Americhem's dedication to innovation, meeting their unique needs and helping them stay ahead in their respective markets.”

Enhancing Medical Devices with Rigorous Material Performance and Compliance

Linda Boyett, Vice President of Global Technology & Innovation at Americhem, said Ecolube™ MD has undergone testing for performance and biocompatibility. Internal testing has indicated similar performance to the more traditional internal lubricants and wear resistant additives in most cases. Ecolube™ MD has undergone ISO10993 –5 testing for biocompatibility as part of the global medical compliance certifications.

“ISO10993 – 5 testing for biocompatibility is an important global medical compliance certification, and we’re proud that EcoLube™ MD is a proven solution that supports sustainability and performance for the healthcare industry,” said Boyett.

EcoLube™ Family of Lubricants

EcoLube™ shatters the limitations of conventional lubrication, ushering in a new era of embedded performance. This revolutionary technology integrates specially designed functional additives directly into the material, providing long-lasting lubrication from within. A variety of functional additives cater to specific applications, resulting in a versatile EcoLube™ product line capable of tackling a wide range of lubrication challenges.

- Solid state, non-migrating lubricants that stand up to extreme pressures, reducing frictional wear and "slip-stick" behavior in nylon bearings.
- Multifunctional, migrating, boundary lubricants reduce the coefficient of friction and wear rate by providing immediate lubrication at start-up and high speeds.
- Non-traditional formulations offer shear reinforcement and abrasion resistance between moving, mating parts.

- Low friction, non-migratory additives are designed to offset PTFE in various applications and thermoplastics.
- Ecolube™ MD biocompatibility testing and compliance with the medical certifications are coupled with AEC's stringent Process Change Management commitments and locked formulation promise make it an easy choice for a variety of medical applications.

A Wide Range of Base Resins

Americhem has formulated EcoLube™ compounds in a wide variety of base resins, including ABS, PBT, PCABS, PC, PEI, PPE, PPS, PE, PP, PSU, PPSU, POM, PEEK, PPA, PA, and TPU.

“We pride ourselves on our ability to customize products to fit end-market performance, conversion processes, color, and aesthetic requirements. By working closely with our customers, we shape specifications and new technologies to meet their unique needs and sustainability objectives.” added Miklos.

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About Americhem

Americhem is an innovative, technology-driven leader in the global polymer industry. Its foundation is built around delivering Performance, Solutions and Trust through close collaboration with customers. All of the company's products are backed by complete technical support that ensures quality, reliability, and value. Americhem operates 10 manufacturing plants and maintains sales offices throughout the world.