# **INLUBE®** FOR HEALTHCARE APPLICATIONS

# WHO WE ARE

Americhem Healthcare is the preferred global specialty thermoplastics compounder for medical device development. We are experts in solving tribology applications with the perfect combination of fillers and additives that will help keep your medical device product development moving smoothly.

# WHAT IS INLUBE<sup>®</sup>?

**InLube**<sup>®</sup> is Americhem's brand of internally lubricated compounds and alloys. **InLube**<sup>®</sup> is specially designed to help manufacturers reduce the wear and friction of moving plastic parts, reduce noise during use, and decrease coefficient of friction for plastic on plastic and plastic on metal applications.

## WHY USE INLUBE®?

Lubrication provides essential functions for plastic molded components that are meant to be in motion. **InLube®** combines our specialty thermoplastics compounding experience with our lubricant additive technology to offer the industry's most advanced solutions packaged to optimize the performance of your products.

**InLube**<sup>®</sup> compounds are developed with cost reduction and service life in mind, offering a lightweight and suitable replacement for metal with formulations that resist corrosion and other damaging factors. Friction reduction advantages also include reduced fatigue and vibration for surgeons and the elimination of abrasion debris. Let **InLube**<sup>®</sup> materials enhance the characteristics of plastics, taking your product to a whole new performance level!

# Types of Lubricants Used in InLube®

**InLube®** provides inherent and lasting material lubrication through the addition of lubricant fillers, that can deliver unique advantages across different resin bases. Below are some of the most significant benefits of these compounds, listed by filler type:

- Graphite soft carbon allows molecules to easily slide over each other
- MoS<sub>2</sub> nylon applications requiring reduced wear and "slip-stick" behavior in bearings
- PTFE reduces wear and friction for a wide range of amorphous and crystalline thermoplastics
- Silicone behaves as a boundary lubricant to provide reduced wear rates and coefficients of friction and immediate lubrication at start-up and high speeds
- Aramid Powder/Fiber for heat resistance and strength
- Proprietary Low Friction Additives non-migratory additives designed to offset PTFE in various applications and thermoplastics

# **BASE POLYMERS**

ABS, PBT, PCABS, PC, PEI, PPE, PPS, PE, PP, PSU, PPSU, POM, PEEK, PPA, PA, TPU

# MARKETS AND APPLICATIONS





Service

Reach

Quality

**Specialization** 

# **APPLICATIONS AND EXPERTISE**

# Predicting the Coefficient of Friction and Wear-Resistance Rate

 Using industry backed data, our experts can analyze the application, materials of the mating parts, product life cycle and frequency of use and our experience includes a practical approach to ensuring you achieve real-world tribology, moldability and CTQ's.

#### **APPLICATIONS**

#### **Drug Delivery Devices**

- Injection Pens
- Auto-injectors
- Syringes

#### **Advanced Instrumentation**

- Surgical Robotics
- Battery-powered Laparoscopic Tools

#### Pumps

- Peristaltic and Volumetric Pumps
- Syringe Pumps
- Cardio-pulmonary

#### Fluid Management

- Catheters
- Catheter Introducers

### WHY AMERICHEM HEALTHCARE?

#### Dedicated Healthcare Division Focused on Your Success

By combining our 30 years of experience engineering plastic for medical applications with our technical capabilities and vast resources, we are uniquely positioned to develop, produce, and test new and innovative biocompatible compounds. Beyond world-class clean manufacturing and unbiased material guidance, Americhem adheres to industry standards.

As your Trusted Partner, our material compounding experts are eager to share our knowledge and advise on a customized solution that best suits your processing and end-use requirements. Connect with one of our team members today.

## **Medical Industry Standards**



https://catalog.ulprospector.com/ProductBrowser.aspx?I=2501 Medical Device Policy: https://www.americhem.com/pages/legal



HEALTHCARE