



» APPLICATION BULLETIN

Mevopur™ Healthcare Functional Additives Laser Marking Additives for Medical Devices and Pharmaceutical Packaging

Laser marking offers several advantages compared to other marking technologies. It yields precise markings without the use of solvents or inks, or the need of any pre-treatment, making it a more environmentally friendly process. The marking is abrasion resistant and long-lasting. Laser marking also achieves fast writing speeds at low operating costs. In some cases, additives are required to achieve the desired marking quality by enabling the plastic to absorb laser energy and/or improve the laser marking contrast. Additives can also be used to increase laser marking speed and reduce the needed laser energy.

Mevopur™ Healthcare Functional Additives for laser marking are additive concentrates or ready-to-use compounds specially developed for use in healthcare applications. They are formulated with a non-migratory additive system and yield durable and highly resistant markings that can withstand repeated sterilization cycles. Potential applications include graduation markings for dose-dials, syringes and droppers, and serialization/coding (e.g., UDI) for medical devices and pharmaceutical packaging. Our team of experts provides guidance on the best solution for your project, considering specific laser marking methodology, regulatory requirements, application and processing settings.

KEY CHARACTERISTICS

- Designed for Nd: YAG lasers operating between 1060-1070 nm
- Available for different polymers including PP, PE, PC, PBT, POM, ABS, MABS
- Manufactured at several ISO 13485 certified sites across the globe, providing consistency and increased security of supply
- Documented change control beyond CAS number, reducing risk of change
- Can be designed for dark marking on natural or white/light colored background or light marking on black/dark background

REGULATORY SUPPORT

- Raw materials tested to:
 - ISO 10993-1 and USP <87> <88> biological evaluation
 - European Pharmacopeia 3.1.3/3.1.5 (polyolefin) or 3.1.15 (polyester)
 - USP <661.1> (polyethylene, polyester)
 - ICH Q3D elemental impurities
- Registered Drug Master File (Type III) and/or Device Master File
- Food contact declaration according to US FDA/EU*

* US FDA/EU compliance information available upon request.



Healthcare use limitations apply—see below.

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Avient is committed to the needs of our healthcare customers. As part of our commitment, we publish Avient’s Mevopur™ product policy and use limitations to assist customers in their product selection.

It is the responsibility of the medical device manufacturer and the person placing the medical device on the market to ensure compliance of the medical device with all applicable laws and regulations, including the suitability of all raw materials and components used for its manufacture.

Please be aware that there are certain applications Avient’s Mevopur products have not been designed for, nor are they promoted or intended for use in: including, but not limited to long-term or permanent implants, birth control devices, or plastic surgery.

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