

> APPLICATION BULLETIN

Mevopur[™] Healthcare Functional Additives for Medical Devices and Diagnostic Equipment

Mevopur[™] Healthcare Functional Additives help protect and enhance the performance of polymers used in applications, such as medical housings, drug delivery devices, syringes and needles, diagnostics, and catheters. The portfolio includes formulations for UV protection, friction reduction, protection against oxidation, improved clarity, gamma/e-beam sterilization protection, reduction of static electricity buildup, laser marking/welding, and more. These functional additives are available as concentrates to dilute into the polymer or ready-to-use formulations that can be used without dilution.

KEY CHARACTERISTICS

- Manufactured at four ISO 13485 certified sites, providing global consistency and increased security of supply
- Documented change control beyond CAS number reducing risk of change
- Non-phthalate and formulated without animalderived substances
- Available for use in a wide range of polymers including polyolefins, styrenics, polycarbonate and alloys, polyester, POM
- Functionality can be combined with colorants into convenient combination concentrates and ready-to-use formulations

REGULATORY SUPPORT

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





FUNCTIONALITY	TARGET APPLICATIONS	DRUG DELIVERY DEVICES	SYRINGES & NEEDLES	DIAGNOSTICS	CATHETERS
Clarifying PP	Sorbitol-free for transparent applications with reduced migration and improved thermal stability	\checkmark	\checkmark	\checkmark	~
Lubricant— permanent/ non-migrating	Fast acting reduction in friction for wide variety of polymers such as PP, ABS, POM, PC	~	~		~
Protection from UV in transparent applications for PP, PE, PETG, COP	UV blocking in 290-450nm with no impact on clarity; can be combined with colors (e.g., amber)	\checkmark	√		
Antistatic ready-to- use solution for PP, ABS, PC/ABS	Permanent/non-migrating; fast decay time independent of % relative humidity	~			
Gamma/e-beam sterilization protection of the polymer	Preserving the properties of PP and COC/COP; reduction in yellowing using Color Compensation Technology (CCT)	\checkmark	\checkmark		~
Reduced material consumption/cycle time—nucleation	Fast acting new generation nucleant for PE and PP; improved thermal and mechanical properties allows wall thinning; reduction of tolerance/dimensional problems between different colors	~	~	\checkmark	
Laser marking replacing ink printing/labels	Solvent-free, high-speed identification for Nd/YAG laser for PE,PP, ABS, PC, POM	\checkmark	\checkmark	\checkmark	~
Antioxidants for PE, PP, TPE	Thermal protection during converting/downstream sterilization	\checkmark	\checkmark	\checkmark	
Brand protection/ anticounterfeit	Covert and non-covert systems	\checkmark			√

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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