

> APPLICATION BULLETIN

Mevopur™ Healthcare Functional Additives for Pharmaceutical Packaging

Mevopur™ Healthcare Functional Additives help protect and enhance the performance of polymers used in pharmaceutical packaging products such as vials, bottles, closure systems, films and combination devices. The portfolio includes formulations for UV protection, slip/torque reduction, protection against oxidation, improved clarity, gamma/e-beam sterilization protection, and more. These functional additives are available as concentrates to dilute into the polymer, or ready-to-use formulations that can be used as such 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 or formulations

REGULATORY SUPPORT

- Pre-tested raw materials:
 - 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)
- Food contact established with FDA/EU*



FUNCTIONALITY	TARGET APPLICATIONS	EBM/IBM CONTAINERS	CLOSURES	FILM	COMBINATION DEVICES
Clarifying PP	Sorbitol-free—possibilities in packaging ocular solutions	✓	✓		√
Slip/torque reduction	Slip for PE, PP films, processing aid, torque reduction for closures		✓	✓	
Protection from UV in transparent packaging for PP, PE, PETG, COP	UV blocking in 290–450nm with no impact on clarity	✓		✓	✓
Antistatic ready-to-use solution for PE films e.g. for API handling	Permanent/non-migrating; fast decay time independent of % relative humidity			✓	
Antistatic masterbatch for PE films	Cost effective, long-lasting, migrating type but with biological evaluation			✓	
Gamma/e-beam sterilization protection of the polymer	Preserving the properties of PP and COC/COP. Reduction in yellowing using Color Compensation Technology (CCT)	✓			✓
Reduced material consumption/cycle time/improved properties—nucleation	Fast acting new generation nucleant for PE and PP; improved dimensional stability, thermal and mechanical properties	✓	√		✓
Laser marking replacing ink printing/labels	Solvent-free, high-speed identification for Nd/YAG laser	✓	✓		✓
Antiblock for PE/PP film	Non-migrating additive system maintaining high gloss and printability			✓	
Antioxidants for PE, PP, TPE	Thermal protection during converting/ downstream sterilization	✓	✓	✓	✓
Brand protection/ anticounterfeit	Range of covert and non-covert systems	✓	✓		✓
Volatiles/odor absorber for PE/PP	Physical absorption of a wide range of molecules responsible for odor, VOC and potential extractables/ leachables in plastics	✓			✓

Healthcare use limitations apply—see below.

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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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