

APPLICATION BULLETIN

Mevopur™ Healthcare Functional Additives

Non-PFAS low retention compound for pipettes

Low retention additives help make in vitro diagnostic tests more accurate by keeping liquids from adhering to the inner walls of pipette tips and enabling precise dosing of the reagents. As many countries tighten regulations around the use of per- and polyfluoroalkyl substances (PFAS), manufacturers may prefer to use non-fluorinated additives to achieve the high-performance water repellency required for pipettes used in medical applications.

Mevopur™ non-PFAS low retention compound is formulated without intentionally added PFAS, as well as without slip agents, plasticizers, or biocides that may cause interference with protein or DNA assays. Its efficient hydrophobic system enables optimal fluid release from polypropylene pipette tips used in scientific and medical laboratory settings to support repeatable, precisely conducted, and more reliable results. Optimally dispersed into an irradiation-stable polypropylene grade, the compound is engineered to withstand typical electron-beam and gamma radiation sterilization doses applied to pipettes (usually up to 15 kGy), with minimum yellowing, and fast recovery of hydrophobicity post-radiation. Additionally, it follows the same “controlled, consistent, compliant” concept as other Mevopur products with pre-testing to ISO, USP and ICH Q3D protocols and a holistic change control program that reduces the risk of performance and quality loss associated with changes in raw materials and manufacturing processes.

KEY CHARACTERISTICS

- Achieves high water contact angles contributing to durable hydrophobicity
- Manufactured at ISO 13485 certified sites under holistic change control program
- Withstands typical electron-beam and gamma radiation sterilization doses applied to pipettes (usually up to 15 kGy)
- Has no significant impact on visual clarity
- Can be adapted to specific requirements—e.g., color, different polypropylene grade*

REGULATORY SUPPORT

The compound’s raw materials are pre-tested and meet relevant criteria in:

- Biological reactivity standards ISO 10993-1 and USP 87, 88 (including class VI)
- European Pharmacopeia, monograph 3.1.3 (polyolefins)
- US Pharmacopeia, USP <661.1>
- Extractable elements as per ICH Q3D
- Registered Drug Master File (DMF type III) on file with FDA (DMF 27630)

* low-retention properties might need to be reassessed case by case

AVIENT™

1.844.4AVIENT
www.avient.com

Copyright © 2025, Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Avient makes no warranties or guarantees respecting suitability of either Avient's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. AVIENT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

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.

For more detailed information on Mevopur uses and restrictions see www.avient.com/healthcare-use-limitations-mevopur-products or contact your Avient sales representative.