Eastman MXF221
copolyester

Increase the life expectancy of your medical devices.

As a fully compounded polymer, Eastman MXF221 copolyester offers superior chemical resistance, ensuring durability and impact strength for medical device housings and hardware.

According to the Centers for Disease Control (CDC), 1 in every 25 hospital patients has at least 1 health care-associated infection (HAI)—a concern for health care providers and medical device manufacturers alike.

To further reduce hospital-acquired conditions, providers are sterilizing and sanitizing equipment with increasingly more stringent disinfectants. However, some polymers used in medical devices will craze, crack, and discolor when exposed to harsh cleaners. Even worse, they significantly lose their impact strength, causing devices to break with everyday bumps and use.

Cracking and breaking plastic is not only a cost issue; it's a quality-of-care issue. Now more than ever, medical devices have to keep pace with advances in technology as well as increased use of stringent disinfectants, solvents, and cleaners. That includes the polymers used in equipment housings, which are now subject to repeated cleaning.

After all, how helpful can a medical device be if it can't survive being disinfected?

Disinfect without distress.

Complying with hospital Environmentally Preferable Purchasing (EPP) guidelines, Eastman MXF221 copolyester is a medical grade polymer that provides excellent chemical resistance and is not manufactured with substances containing halogens. Ideal for electronic device housings, it can withstand many aggressive disinfectants without cracking, crazing, or hazing.

As a fully compounded polymer, Eastman MXF221 offers the chemical resistance and durability to stand up to the daily rigors of hospital life.

In testing that measures notched Izod impact strength, Eastman MXF221 retained more than 90% of its original impact strength after exposure to stringent disinfectants—far superior to commonly used materials such as polycarbonate blends.

Eastman MXF221 can be molded into clear or opaque parts. As a homogeneous pellet solution, it offers ease of processing with greater consistency, uniform color matching, and reduced scrap rates.

Medical advancement through material innovation

Now more than ever, it's important to design medical device housings and hardware with a polymer that has superior chemical resistance—whether it's resistance to harsh oncology medicines or repeated exposure to stringent disinfectants, solvents, and cleaners.

Developed in response to customer demand and a growing need, Eastman MXF221 copolyester is uniquely suited for medical devices and electronic device housings. Based on the same innovations that led to Eastman Tritan™ copolyester, the standard in polymer durability and safety in medical devices, housewares, and durable goods, this innovative material offers game-changing durability for an industry that can't afford to compromise.

Before you demand more from your devices, demand more from your polymer. To see how Eastman MXF221 copolyester can enhance your devices and brands, contact your Eastman representative or visit Eastman.com/medical.

Eastman MXF221 copolyester is ideal for brands that demand:

- Unsurpassed chemical resistance to harsh disinfectants
- Superior impact strength—even after disinfection
- Product longevity
- Clear or opaque parts
- Uniform color matching
- A fully compounded one-pellet solution
- Biocompatibility
- UL 94 FR V-2 flame retardance

EASTMAN

The results of **insight**™

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Safety Data Sheets providing safety precautions that should be observed when handling and storing Eastman Chemical Company ("Eastman") products are available online or by request. You should obtain and review the available material safety information before handling any of these products. If any materials mentioned are not Eastman products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

It is the responsibility of the medical device manufacturer ("Manufacturer") to determine the suitability of all component parts and raw materials, including any Eastman product, used in its final product to ensure safety and compliance with requirements of the United States Food and Drug Administration (FDA) or other international regulatory agencies.

Eastman products have not been designed for nor are they promoted for end uses that would be categorized either by the United States FDA or by the International Standards Organization (ISO) as implant devices. Eastman products are not intended for use in the following applications: (1) in any bodily implant applications for greater than 30 days, based on FDA-Modified ISO-10993, Part 1, "Biological Evaluation of Medical Devices" tests (including any cosmetic, reconstructive, or reproductive implant applications); (2) in any cardiac prosthetic device application, regardless of the length of time involved, including, without limitation, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices; or (3) as any critical component in any medical device that supports or sustains human life.

For manufacturers of medical devices, biological evaluation of medical devices is performed to determine the potential toxicity resulting from contact of the component materials of the device with the body. The ranges of tests under FDA-Modified ISO-10993, Part 1, "Biological Evaluation of Medical Devices" include cytotoxicity, sensitization, irritation or intracutaneous reactivity, systemic toxicity (acute), subchronic toxicity (subacute), implantation, and hemocompatibility. For Eastman products offered for the medical market, limited testing information is available on request. The Manufacturer of the medical device is responsible for the biological evaluation of the finished medical device.

The suitability of an Eastman product in a given end-use environment is dependent on various conditions including, without limitation, chemical compatibility, temperature, part design, sterilization method, residual stresses, and external loads. It is the responsibility of the Manufacturer to evaluate its final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

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