dsm-firmenich

Medureon™
Medical Polyurethane

Biomedical Polymer Pellets

ATPU
Bionate®
Bionate® II
CarboSil®
Elasthane™

Biocompatibility

Long-term stability

Proven clinical legacy

Engineered for excellence, because failure is not an option

From short-term delivery systems to long-term implants, Medureon™ pellets are engineered to meet your most critical performance and processing needs. Each material is supported by regulatory documentation, expert guidance, and scalable supply capabilities.

Regulatory confidence

- FDA Master Files available to support customer's regulatory submissions.

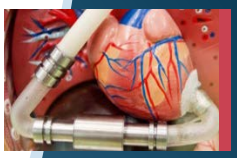
Processing Flexibility

- Compatible with extrusion, molding, casting, spraying and bonding.

Application Versatility

- Flexible solutions for evolving medical needs from drug delivery to long-term implants.

Differentiators by application



Vascular
Biomedical's biocompatible, hemocompatible, and durable polyurethanes*, including Bionate®, Biospan®, Carbosil®, and Elasthane™, are the ideal solution for all your vascular needs.

Drug Delivery
Medureon™ offers materials with low temperature processing capabilities, hydrophilic, and hydrophobic drug diffusion, and backed by advanced material science and expert support.

Orthopedics
Load bearing capacity, wear resistance, lubricity and biostability* are all properties demonstrated by Medureon™, including Bionate®, BioSpan®, Carbosil®, and Elasthane™.

Diabetes
With exceptional performance and processing versatility, Medureon™ offers key benefits, such as ease of processing, tunability, and multi-analyte capabilities.

One portfolio with endless possibilities

Medureon™ product highlights*

Product	Key Composition	Key Benefits / Applications
ATPU	Aliphatic polyether TPU	• UV-Stable, tunable drug delivery matrix, primarily used in short-term implants.
Bionate®	Aromatic polycarbonate TPU	• With nearly two decades of clinical use, Bionate® is among the most extensively tested biomedicalpolymers available. Providing durability, abrasion and impact resistance making it ideal forneurostimulation, vascular, and orthopedic implants.
Bionate® II	Aromatic polycarbonate TPU	• Enhanced with surface modified end-groups, for increased mechanical and dielectric performance. Ideal for long-term, flexing implants.
CarboSil®	Aromatic Silicone-polycarbonate TPU	• Excellent oxidative and hydrolytic stability; used in drug eluting systems, vascular access devices, and diabetes applications.
Elasthane™	Aromatic polyether TPU	• Hemocompatible and hydrolytically stable; used in cardiovascular and orthopedic systems.

Common TPU properties*

Hydrolytic & oxidative stability	• Designed to resist in vivo degradation in long-term implants
Drug delivery compatibility	• Demonstrated long-term biostable implants with hydrophobic and hydrophilic drug diffusion capabilities
Tunable properties	• Available in a range of hardness and elasticity
Radiation & sterilization compatibility	• Stable under gamma, Ethylene Oxide, and e-beam sterilization methods
Surface modifiability	• Compatible with SME® and SAME® technologies for tailored surface properties
Biocompatibility	• Suitable for short- and long-term human implantation • Testing performed in accordance with applicable ISO 10993 standards
Mechanical Strength	• High durability, tensile strength, and abrasion resistance across applications

At Biomedical we specialize in medical materials with performance that speaks for itself.

Why settle for less when it's costing you more?

Product Disclaimer The biocompatibility test results provided apply to the raw non-sterile pellet form of each material. Evaluation of the biological safety and functional performance of a material produced by dsm-firmenich in a final, finished medical device remains the responsibility of the legal medical device manufacturers. This includes ensuring safety and compliance with applicable regulatory requirements. Biomedical materials are supplied under detailed product specifications within contractual agreements.

***Data on file**

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