Product Information

VESTAMID® Care ME62-B

POLYAMIDE 12 ELASTOMER MOLDING COMPOUNDS

VESTAMID® Care ME62-B is free of plasticizers, heat and light stabilized. **VESTAMID® Care ME62-B** is resistant to body fluids and toxicologically safe.

VESTAMID® Care ME-B grades are engineered to adhere to different polymer types in a multi-layer tube or film extrusion without the need of adhesives, compatibilizers or additives that might migrate out of the device.

VESTAMID® Care ME-B grades are flexible polyether block amides (PEBA) resins.

The advantages at a glance:

- High flexibility & elasticity
- Good rebound properties
- High impact resistance
- Excellent dimensional stability
- High chemical resistance
- Easy processability & colorability
- Plasticizer-free
- Gamma and EtO sterilization resistant
- Tough and resilient

Biocompatibility of VESTAMID® Care ME-B

Biocompatiblity was tested following ISO10993-1 recommendations for a surface medical device with up to 30 days body contact.

The material fulfills the requirements of USP<88> class VI.

Tests were performed by independent, certified laboratories.

Biocompatibility tests for VESTAMID® Care:

Standard	Description
ASTM F756-08	Hemocompatibility
ISO 10993-5	Cytotoxicity
ISO 10993-10	Sensitization: Maximization test according to Magnusson and Kligman
ISO 10993-10	Irritation: Intracutaneous Reactivity
ISO 10993-11	Acute Systemic Toxicity
USP Class VI	Acute Systemic Toxicity Intracutaneous Reactivity Muscle Implantation

The results presented were generated from a small number of production lots. They are therefore provisional and not yet the result of a statistical analysis.

Key Features

Industrial Sector
Medical Devices

Conformity
Biocompatibility, Medical application

Processing
Injection molding

Additives
Unfilled

Delivery form
Pellets, Granules

LCA-values	dry	Unit	Test Standard
LCA certifier	TÜV Rheinland	-	ISO 14040, 14044
Blue water consumption	**24.3**	kg	ISO 14040, 14044
Global Warming Potential incl. bio. C incl. LUC	**6.5**	kg CO_2 eq./kg	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	**6.5**	kg CO_2 eq./kg	ISO 14040, 14044
Land use (ReCiPe 2016)	**0**	Annual crop eq. y	ISO 14040, 14044

Mechanical properties ISO	dry / cond	Unit	Test Standard
Tensile modulus	**75400 / -**	psi	ISO 527
Stress at 50% strain	**3770 / -**	psi	ISO 527
Stress at break	**4930 / -**	psi	ISO 527
Nominal strain at break, tB	**>50 / -**	%	ISO 527
Typical for the mat. nom. strain at br., tB	**300**	%	ISO 527
Charpy impact strength, +23°C	**N / -**	ftlb/in^2	ISO 179/1eU
Charpy impact strength, -30°C	**N / -**	ftlb/in^2	ISO 179/1eU
Charpy notched impact strength, +23°C	**23.8 / -**	ftlb/in^2	ISO 179/1eA
Type of failure	**C / -**	-	-

Charpy notched impact strength, -30°C	**3.33 / -**	ftlb/in²	ISO 179/1eA
Type of failure	**C / -**	-	-

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature	**345 / ***	°F	ISO 11357-1/-3
Temp. of deflection under load A, 1.80 MPa	**110 / ***	°F	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	**202 / ***	°F	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	**336 / ***	°F	ISO 306

Physical properties	dry / cond	Unit	Test Standard
Density	**1.01 / -**	g/cm³	ISO 1183
Water absorption	**0.037 / ***	%	Sim. to ISO 62
Shore D hardness	**63[b] / -**	-	ISO 7619-1

b: 3 seconds

Burning Behav.	dry / cond	Unit	Test Standard
Burning behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.0630 / ***	in	-
Oxygen index	**22.8 / ***	%	ISO 4589-1/-2

Optical properties	dry	Unit	Test Standard
Color b	**10**	-	CIE

Rheological properties	dry / cond	Unit	Test Standard
Melt volume-flow rate, MVR	**12 / ***	cm³/10min	ISO 1133
Temperature	**230 / ***	°C	-
Load	**2.16 / ***	kg	-

Polymer analytics	dry / cond	Unit	Test Standard
Viscosity number	**4710 / ***	in³/lb	ISO 307, 1157, 1628

Amino end group	**48**	mmol/kg	Evonik standard
Carboxyl end group	**33**	mmol/kg	Evonik standard

Characteristics

Special Characteristics
Light-stabilized, High heat resistant

Features
Low coefficient of friction

Regulatory
US Pharmacopeia Class VI conformity

Color
Natural color

Chemical Resistance
General chemical resistance