VESTAMID®

Product Information

VESTAMID® LXM8

MEDIUM-VISCOSITY, GLASS FIBER-REINFORCED, HEAT- AND UV-STABILIZED PA12 COMPOUND

VESTAMID® LXM8 is a medium-viscosity, glass fiber-reinforced and heat-stabilized polyamide 12 compound with good applicability for sport components such as shoe soles requiring very good fatigue performance and bonding ability to TPUs. Parts made of the semi-crystalline polyamide VESTAMID® LXM8 are characterized by excellent dimensional stability, constantly high impact strength, low coefficient of friction, good chemical resistance at changing ambient humidity, and excellent bonding strength to TPU.
VESTAMID® LXM8 is suitable for manufacturing injection molded parts with efficient cycle times.

VESTAMID® LXM8 is supplied as cylindrical granules ready for processing, in moisture barrier bags. Inside the original and undamaged packaging the product has a shelf life of at least two years when stored in dry rooms at temperatures not exceeding 30°C.

Key Features

Industrial Sector
Sports and Lifestyle

Processing
Injection molding

Delivery form
Pellets, Granules

Optics
Translucent

Resistance to
Heat (thermal stability), UV / light / weathering, Fatigue resistance

Electrical
Insulating

Additives
Glass fibers

LCA-values	dry	Unit	Test Standard
LCA name of certificate	VESTAMID® CW modified GF	-	ISO 14040, 14044
LCA certifier	TÜV Rheinland	-	ISO 14040, 14044
Blue water consumption	**237.7**	kg	ISO 14040, 14044

Global Warming Potential incl. bio. C incl. LUC	**6.3**	kg CO_2 eq./kg	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	**6.6**	kg CO_2 eq./kg	ISO 14040, 14044
Land use (ReCiPe 2016)	**2.9**	Annual crop eq. y	ISO 14040, 14044
GWP savings as compared to 2023 reference	**-1.6**	kg CO_2 eq./kg	ISO 14040, 14044

Mechanical properties ISO	**dry / cond**	**Unit**	**Test Standard**
Tensile modulus	**2270 / -**	MPa	ISO 527
Stress at break	**55 / -**	MPa	ISO 527
Strain at break, B	**16 / -**	%	ISO 527
Charpy impact strength, +23°C	**90 / -**	kJ/m²	ISO 179/1eU
Type of failure	**C / -**	-	-
Charpy impact strength, -30°C	**95 / -**	kJ/m²	ISO 179/1eU
Type of failure	**C / -**	-	-
Charpy notched impact strength, +23°C	**11 / -**	kJ/m²	ISO 179/1eA
Type of failure	**C / -**	-	-
Charpy notched impact strength, -30°C	**6 / -**	kJ/m²	ISO 179/1eA
Type of failure	**C / -**	-	-
Flexural modulus, 23°C	**1890 / -**	MPa	ISO 178

Thermal properties	**dry / cond**	**Unit**	**Test Standard**
Melting temperature	**180 / ***	°C	ISO 11357-1/-3

Physical properties	**dry / cond**	**Unit**	**Test Standard**
Density	**1060 / -**	kg/m³	ISO 1183
Water absorption	**0.25 / ***	%	Sim. to ISO 62
Humidity absorption	**0.14 / ***	%	Sim. to ISO 62
Shore D hardness	**75 / -**	-	ISO 7619-1
Density	**1060**	kg/m³	ASTM D 792

Optical properties	dry	Unit	Test Standard
Color L	**63.7**	-	CIE
Color a	**-2.7**	-	CIE
Color b	**4**	-	CIE

Rheological properties	dry / cond	Unit	Test Standard
Molding shrinkage, parallel	**0.6 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.4 / ***	%	ISO 294-4, 2577
Mold temperature	**60 / ***	°C	-
Melt temperature	**240 / ***	°C	-

Characteristics

Applications
General purpose

Special Characteristics
Semi-crystalline, Light-stabilized, U.V. stabilized

Color
Natural color

Additives
Antioxidant agent, Light stabilizer

Delivery form
Cylindrical pellets