VESTAMID®

Product Information

VESTAMID® LX9012 T10

HEAT STABILIZED AND LIGHT RESISTANT PA12 COMPOUND

VESTAMID® LX9012 T10 has been specially designed for application in injection molded sport shoe soles. Parts made of VESTAMID® LX9012 T10 feature good bonding performance, good transparency, high flow ability, good screen and sublimation printing, outstanding scratch resistance, and excellent impact strength at low temperatures. The semi-crystalline compounds based on PA12 absorb only low quantities of water. Therefore, molded parts show excellent dimensional stability, constantly high impact strength, low coefficient of friction and good chemical resistance at changing ambient humidity.
VESTAMID® LX9012 T10 is supplied as cylindrical granules, ready for processing in moisture-proof packaging.

Inside the original and undamaged packaging the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30°C.

Key Features

Industrial Sector
Sustainable, Sports and Lifestyle

Sustainability
Sustainable electricity

Processing
Injection molding

Delivery form
Pellets, Granules

Optics
Translucent

Resistance to
Fatigue resistance

Electrical
Insulating

Additives
Lubricant, Unfilled

LCA-values	dry	Unit	Test Standard
LCA name of certificate	VESTAMID® LX modified low	-	ISO 14040, 14044
LCA certifier	TÜV Rheinland	-	ISO 14040, 14044
Blue water consumption	**190.7**	kg	ISO 14040, 14044

Global Warming Potential incl. bio. C incl. LUC	**5.5**	kg CO_2 eq./kg	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	**5.7**	kg CO_2 eq./kg	ISO 14040, 14044
Land use (ReCiPe 2016)	**2.4**	Annual crop eq. y	ISO 14040, 14044
GWP savings as compared to 2023 reference	**-3.1**	kg CO_2 eq./kg	ISO 14040, 14044

Mechanical properties ISO	**dry / cond**	**Unit**	**Test Standard**
Tensile modulus	**170000 / -**	psi	ISO 527
Yield stress	**5370 / -**	psi	ISO 527
Yield strain	**5 / -**	%	ISO 527
Stress at break	**7690 / -**	psi	ISO 527
Nominal strain at break, tB	**>50 / -**	%	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	**3.81 / -**	ftlb/in^2	ISO 179/1eA
Type of failure	**C / -**	-	-
Flexural modulus, 23°C	**131000 / -**	psi	ISO 178

Thermal properties	**dry / cond**	**Unit**	**Test Standard**
Melting temperature	**349 / ***	°F	ISO 11357-1/-3
Melting Temperature	**349**	°F	ASTM D 3418

Physical properties	**dry / cond**	**Unit**	**Test Standard**
Density	**1.02 / -**	g/cm^3	ISO 1183
Shore D hardness	**72 / -**	-	ISO 7619-1
Density	**1.02**	g/cm^3	ASTM D 792

Rheological properties	**dry / cond**	**Unit**	**Test Standard**
Molding shrinkage, parallel	**1.3 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.3 / ***	%	ISO 294-4, 2577

Mold temperature	**176 / ***	°F	-
Melt temperature	**464 / ***	°F	-

Characteristics

Applications
General purpose

Color
Natural color

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

Additives
Antioxidant agent, Light stabilizer

Features
Lightweight

Delivery form
Cylindrical pellets