Product Information

VESTAMID® LX9057 GN E60044

LOW VISCOSITY, SELF-EXTINGUISHING POLYAMIDE 12 COMPOUND FREE OF HALOGEN

VESTAMID® LX9057 GN E60044 is a heat- stabilized compound with an efficient halogen-free flame retardant. Tested according to UL94, it complies with the flammability classification V-2.

The halogen-free formulation makes VESTAMID® LX9057 GN E60044 especially suitable for the electronic and cable industry.

VESTAMID® LX9057 GN E60044 can be used for injection molding as well as for wire extrusion coating. The semi-crystalline compounds based on PA12 only absorb small amounts of water.

Therefore manufactured parts exhibit excellent dimensional stability at changing ambient humidity, constant high toughness, low coefficient of friction and good chemical resistance.

Due to the presence of flame retardant the melt temperature should not exceed 240°C. We recommend melt temperatures of 200°C-220°C.

VESTAMID® LX9057 GN E60044 is supplied as cylindrical granules, ready for processing, in moisture-proof bags.

The use of colorants may affect property values.

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, Industry and Engineering

Sustainability
Sustainable electricity

Processing
Injection molding, Extrusion

Delivery form
Pellets, Granules

Resistance to
Heat (thermal stability), Fire / burn

Additives
Flame retardant, Unfilled

LCA-values	dry	Unit	Test Standard
LCA name of certificate	VESTAMID® L Compound medium	-	ISO 14040, 14044
LCA certifier	TÜV Rheinland	-	ISO 14040, 14044
Blue water consumption	**25.6**	kg	ISO 14040, 14044
Global Warming Potential incl. bio. C incl. LUC	**6.0**	kg CO_2 eq./kg	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	**6.0**	kg CO_2 eq./kg	ISO 14040, 14044
Land use (ReCiPe 2016)	**0.1**	Annual crop eq. y	ISO 14040, 14044
GWP savings as compared to 2023 reference	**-2.4**	kg CO_2 eq./kg	ISO 14040, 14044

Mechanical properties ISO	dry / cond	Unit	Test Standard
Tensile modulus	**167000 / -**	psi	ISO 527
Tensile strength	**5220 / -**	psi	ISO 527
Yield stress	**5220 / -**	psi	ISO 527
Yield strain	**13 / -**	%	ISO 527
Stress at 50% strain	**4350 / -**	psi	ISO 527
Stress at break	**5660 / -**	psi	ISO 527
Nominal strain at break, tB	**255 / -**	%	ISO 527
Typical for the mat. nom. strain at br., tB	**100**	%	ISO 527
Charpy impact strength, +23°C	**80.9 / -**	ftlb/in^2	ISO 179/1eU
Type of failure	**C / -**	-	-
Charpy notched impact strength, +23°C	**1.43 / -**	ftlb/in^2	ISO 179/1eA
Type of failure	**C / -**	-	-

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	**1.08 / -**	g/cm³	ISO 1183
Moisture content	**0.05 / -**	wt.-%	ISO 15512
Bulk density, Granulate	**40.7**	lb/ft³	-
Weight per 1000 granules	**16 / -**	g	-
Density	**1.08**	g/cm³	ASTM D 792

Burning Behav.	dry / cond	Unit	Test Standard
Burning behav. at thickness h	**V-2 / ***	class	IEC 60695-11-10
Thickness tested	**0.0315 / ***	in	-

Polymer analytics	dry / cond	Unit	Test Standard
Viscosity number	**3380 / ***	in³/lb	ISO 307, 1157, 1628

Test specimen production	dry	Unit	Test Standard
Injection Molding, melt temperature	**428**	°F	ISO 294
Injection Molding, mold temperature	**176**	°F	ISO 294
Injection Molding, injection velocity	**7.87**	in/s	ISO 294

Characteristics

Applications
Electrical and Electronical, Tube and hose, Cable sheathing

Processing
Wire/Cable extrusion

Special Characteristics
Halogen-free, Semi-crystalline, High heat resistant, Low viscosity

Features
Low coefficient of friction

Color
Green

Additives
Flame retardant, Heat stabilizer

Chemical Resistance
General chemical resistance