VESTAMID®

Product Information

VESTAMID® L1940 BK 9.7504

MEDIUM-VISCOSITY PA12 RESIN FOR THE EXTRUSION AND INJECTION MOULDING

VESTAMID® L1940 BK 9.7504 is a heat-stabilized polyamide 12 compound for injection molding and for the extrusion wire insulation.

Properties of compounds based on PA12 vary little with changing humidity due to low moisture absorption. Parts made of this semi-crystalline material are characterized by exceptional impact strength, low coefficient of friction and good chemical resistance.

Pigmentation may affect 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
Automotive and Mobility, Sustainable, Industry and Engineering

Sustainability
Sustainable electricity

Processing
Injection molding

Delivery form
Pellets, Granules

Resistance to
Heat (thermal stability), UV / light / weathering, Oil / fuels

Electrical
Insulating

Conformity
Food contact, Automotive

Additives
Unfilled

LCA-values	dry	Unit	Test Standard
LCA name of certificate	VESTAMID® L Compound low	-	ISO 14040, 14044
LCA certifier	TÜV Rheinland	-	ISO 14040, 14044

Blue water consumption	**25.7**	kg	ISO 14040, 14044
Global Warming Potential incl. bio. C incl. LUC	**6.1**	kg CO_2 eq./kg	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	**6.1**	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	**-2.5**	kg CO_2 eq./kg	ISO 14040, 14044

Mechanical properties ISO	**dry / cond**	**Unit**	**Test Standard**
Tensile modulus	**1550 / -**	MPa	ISO 527
Tensile strength	**46 / -**	MPa	ISO 527
Yield stress	**46 / -**	MPa	ISO 527
Yield strain	**7 / -**	%	ISO 527
Stress at 50% strain	**35 / -**	MPa	ISO 527
Stress at break	**53 / -**	MPa	ISO 527
Nominal strain at break, tB	**245 / -**	%	ISO 527
Charpy notched impact strength, +23°C	**4 / -**	kJ/m²	ISO 179/1eA
Type of failure	**C / -**	-	-
Flexural modulus, 23°C	**1440 / -**	MPa	ISO 178

Thermal properties	**dry / cond**	**Unit**	**Test Standard**
Melting temperature	**177 / ***	°C	ISO 11357-1/-3
Glass transition temperature, DSC	**40 / ***	°C	ISO 11357-1/-2
Melting Temperature	**177**	°C	ASTM D 3418

Burning Behav.	**dry / cond**	**Unit**	**Test Standard**
UL Yellow Card available	yes / *	-	-
Burning behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**1.5 / ***	mm	-
Burnin behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**3.0 / ***	mm	-

Burning behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-

Rheological properties	dry / cond	Unit	Test Standard
Molding shrinkage, parallel	**1.2 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.3 / ***	%	ISO 294-4, 2577
Mold temperature	**80 / ***	°C	-
Melt temperature	**240 / ***	°C	-

Characteristics

Applications
Electrical and Electronical, Fiber optic cable, Cable sheathing

Color
Black

Special Characteristics
Medium viscosity