

Product Information

VESTAMID® L-CF15 BK E70461

CARBON FIBER-REINFORCED, ELECTRICALLY CONDUCTIVE POLYAMIDE 12 COMPOUND



VESTAMID® L-CF15 BK E70461 is a semi-crystalline UV-stabilised compound based on PA12 from which quick-connectors are produced by injection molding. The Polyamid compound is especially suitable for

Automotive and Mobility. Further advantages of VESTAMID® L-CF15 BK E70461 are the characteristic properties of PA12, e.g., low water absorption, good dimensional stability and nearly constant mechanical properties

at changing ambient humidity. Because of its semi-crystalline morphology VESTAMID® L-CF15 BK E70461 provides an excellent chemical resistance.

VESTAMID® L-CF15 BK E70461 is supplied as cylindrical granules, ready for processing, in moisture-proof bags.

Pigmentation may affect values.

The results shown have been generated from a low number of production lots. Therefore, they are preliminary and not yet the result of a statistical evaluation. Therefore they must not be used to establish specifications.

Key Features

Industrial Sector

Automotive and Mobility

Processing

Injection molding

Delivery form

Pellets, Granules

Optics

Laser absorbing

Resistance to

Heat (thermal stability), UV / light / weathering

Electrical

Conductive

Conformity

Automotive

Additives

Carbon fibers

Mechanical properties ISO	dry	Unit	Test Standard
Tensile modulus	8770	MPa	ISO 527
Tensile strength	130	MPa	ISO 527
Yield stress	130	MPa	ISO 527
Yield strain	3.5	%	ISO 527
Stress at break	130	MPa	ISO 527
Strain at break, B	3.7	%	ISO 527
Nominal strain at break, tB	3.7	%	ISO 527
Charpy impact strength, +23°C	55	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	53	kJ/m ²	ISO 179/1eU
Charpy impact strength, -40°C	51	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-
Charpy notched impact strength, -30°C	7	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -40°C	7	kJ/m ²	ISO 179/1eA

Thermal properties	dry	Unit	Test Standard
Melting temperature	178	°C	ISO 11357-1/-3
Glass transition temperature, DSC	38	°C	ISO 11357-1/-2
Temp. of deflection under load A, 1.80 MPa	169	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	179	°C	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	176	°C	ISO 306
Vicat softening temperature B, 50 N, 50 K/h	192	°C	ISO 306

Physical properties	dry	Unit	Test Standard
Density	1100	kg/m ³	ISO 1183
Water absorption	1.27	%	Sim. to ISO 62
Moisture content	0.015	Gew.-%	ISO 15512

VESTAMID®

Density	1100	kg/m ³	ASTM D 792
Shore D Hardness	79	-	ASTM D 2240

Electrical properties	dry	Unit	Test Standard
Volume resistivity, V	0.184	Ohm*m	IEC 62631-3-1

Characteristics

Applications

Quick-connectors

Processing

Casting

Special Characteristics

Halogen-free, Semi-crystalline, Light-stabilized, Medium viscosity

Color

Black

Additives

Conductive agent, Processing aids

Delivery form

Cylindrical pellets

Chemical Resistance

General chemical resistance