# VESTAMID® LX9117 BK

PA12-(GF+CD) Evonik Operations GmbH

## Product Texts

**Electrically polyamide 12 compound for quick connectors**

**VESTAMID® LX9117 BK** is a glass-fiber-reinforced, electrically conductive PA12 molding compound that was developed in particular for the injection molding of connecting elements for fuel line systems (such as quick connectors).

The electrical conductivity of VESTAMID® LX9117 BK changes only slightly on contact with fuels, even if they contain alcohol. This is of great importance for use in fuel-conducting systems.

The material also has the advantageous properties characteristic of polyamide 12. The low water absorption leads to good dimensional stability of components in changing ambient humidity, and the other properties also remain virtually unchanged.

VESTAMID® LX9117 BK is supplied as cylindrical granules, ready for processing, in moisture-proof bags.

Our technical experts would appreciate to give you support regarding the special requirements for the processing of VESTAMID® LX9117 BK.

The use of colorants may change 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.

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.

For information about processing of VESTAMID®, please follow the general commendations about "Processing of VESTAMID® compounds".

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.VESTAMID.COM

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Molding shrinkage, parallel | **0.3 / *** | % | ISO 294-4, 2577 |
| [C] Molding shrinkage, normal | **0.8 / *** | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **7930 / -** | MPa | ISO 527 |
| [C] Yield stress | **127 / -** | MPa | ISO 527 |
| [C] Yield strain | **4 / -** | % | ISO 527 |
| [C] Nominal strain at break | **4 / -** | % | ISO 527 |
| [C] Charpy impact strength, +23°C | **70 / -** | kJ/m² | ISO 179/1eU |
| [C] Type of failure | **C / -** | - | - |
| [C] Charpy impact strength, -30°C | **50 / -** | kJ/m² | ISO 179/1eU |
| [C] Type of failure | **C / -** | - | - |
| [C] Charpy notched impact strength, +23°C | **10 / -** | kJ/m² | ISO 179/1eA |
| [C] Type of failure | **C / -** | - | - |
| [C] Charpy notched impact strength, -30°C | **9 / -** | kJ/m² | ISO 179/1eA |
| [C] Type of failure | **C / -** | - | - |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melting temperature, 10°C/min | **177 / *** | °C | ISO 11357-1/-3 |
| [C] Glass transition temperature, 10°C/min | **40 / *** | °C | ISO 11357-1/-2 |

| | | | |
|---|---|---|---|
| [C] Temp. of deflection under load, 1.80 MPa | **169 / *** | °C | ISO 75-1/-2 |
| [C] Temp. of deflection under load, 0.45 MPa | **179 / *** | °C | ISO 75-1/-2 |
| [C] Vicat softening temperature, B | **173 / *** | °C | ISO 306 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| [C] Water absorption | **1.1 / *** | % | Sim. to ISO 62 |
| [C] Humidity absorption | **0.6 / *** | % | Sim. to ISO 62 |
| [C] Density | **1330 / -** | kg/m³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Injection Molding, melt temperature | **250** | °C | ISO 294 |
| Injection Molding, mold temperature | **80** | °C | ISO 294 |
| Injection Molding, injection velocity | **200** | mm/s | ISO 294 |

[C]: CAMPUS

## Characteristics

**Processing**
Injection Molding, Casting

**Delivery form**
Pellets, Black

**Additives**
Release agent

**Special Characteristics**
Increased electrical conductivity, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

**Applications**
Electrical and Electronical

**Regional Availability**
North America, Europe, Asia Pacific, South and Central America, Near East/Africa