

Product Texts

Base Polymer	Polyamide 6
Filler	12% carbon fiber + 18% glass fiber
Colour	natural (carbon optic)
Special Features	medium viscosity, heat ageing stabilisation, electrical conductive
Market Segment	Automotive, Industries

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	50 / *	cm ³ /10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	15000 / 8000	MPa	ISO 527
Tensile Strength	160 / 95	MPa	ISO 527
Strain at break	1.5 / 4	%	ISO 527
Flexural modulus, 23°C	14000 / 7300	MPa	ISO 178
Flexural strength	240 / 145	MPa	ISO 178
Charpy impact strength, +23°C	45 / 54	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	7 / 12	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	209 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	221 / *	°C	ISO 75-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Volume resistivity	1000 / -	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1000	Ohm	IEC 62631-3-2

Other properties	dry / cond	Unit	Test Standard
Water absorption	4.7 / *	%	Sim. to ISO 62
Humidity absorption	0.5 / *	%	Sim. to ISO 62
Density	1350 / -	kg/m ³	ISO 1183
Global warming potential	5.57	kg CO ₂ eq./kg	ISO 14040, 14044

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 8	h	-
Processing humidity	≤0.12	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	60 - 100	°C	-

Characteristics**Processing**

Injection Molding

Applications

Automotive

Delivery form

Natural Color

Regional Availability

Europe

Special Characteristics

Increased electrical conductivity, Heat stabilized or stable to heat