Durethan® AKV50 000000

PA66-GF50 Envalior

Product Texts

Injection Molding, 50% Glass Reinforced

ISO 1043 PA66-GF50

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**15700 / 10700**	MPa	ISO 527
[C] Stress at break	**220 / 170**	MPa	ISO 527
[C] Strain at break	**2.5 / 4**	%	ISO 527
[C] Charpy impact strength, +23°C	**95 / 95**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**100 / 100**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**19 / 23**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**15 / 15**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**263 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**250 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**250 / ***	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**4 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.4 / ***	%	Sim. to ISO 62
[C] Density	**1570 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Viscosity number	**146 / ***	cm³/g	ISO 307, 1157, 1628

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**300**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**2 - 6**	h	-
Processing humidity	**≤0.12**	%	-
Melt temperature	**280 - 300**	°C	-
Mold temperature	**80 - 120**	°C	-

Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

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

Other text information

Injection molding

PREPROCESSING
Residual moisture content: 0.03 - 0.12%
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING
Melt temperature (Tmin - Tmax): 280 - 300 °C

Mold temperature: 80 - 120 °C