

Durethan® DPAKV50H2.0EF 900116
PA66-GF50

Envalior

Injection Molding, 50% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA66-GF50

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	15200 / 10000	MPa	ISO 527
Stress at Break	195 / 135	MPa	ISO 527
Strain at Break	2.5 / 4	%	ISO 527
Impact Strength (Charpy), +23°C	80 / 80	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	75 / 65	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 20	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	13 / 13	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	1100 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	1000 / -	N	ISO 6603-2
Puncture energy, +23°C	4.2 / -	J	ISO 6603-2
Puncture energy, -30°C	3.4 / -	J	ISO 6603-2
Flexural Modulus (23°C)	14000 / 9500	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	15 / 20	kJ/m ²	ISO 180/1A
Notched Impact Strength (Izod)	13 / 13	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	75 / 75	kJ/m ²	ISO 180/1U

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	261 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	245 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	250 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	15 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	85 / *	E-6/K	ISO 11359-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	4.7 / *	%	Sim. to ISO 62
Humidity absorption	1.3 / *	%	Sim. to ISO 62
Density	1540 / -	kg/m ³	ISO 1183
Bulk density	700	kg/m ³	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	290	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

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

Special Characteristics

Heat aging stabilized

Durethan® DPAKV50H2.0EF 900116
PA66-GF50

Envalior

Delivery form

Pellets

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
