

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

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

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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- any critical component in any medical device that supports or sustains human life.

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