Durethan® BKV30H3.0EF 901510

PA6-GF30 Envalior

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF30

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	9400 / 5500	MPa	ISO 527
Stress at Break	170 / 100	MPa	ISO 527
Strain at Break	3 / 5.8	%	ISO 527
Impact Strength (Charpy), +23°C	65 / 80	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	55 / 55	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	11 / 15	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	750 / 1050	N	ISO 6603-2
Puncture - maximum force, -30°C	650 / 750	N	ISO 6603-2
Puncture energy, +23°C	1.7 / 4.6	J	ISO 6603-2
Puncture energy, -30°C	1.3 / 1.4	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	221 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	100 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.63 / 4.04	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.43 / 9.23	-	IEC 62631-2-1
Dissipation Factor, 100Hz	0.02 / 0.08	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	0.03 / 0.13	E-4	IEC 62631-2-1
Volume Resistivity	>1E13 / 7.7E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 4.1E14	Ohm	IEC 62631-3-2
Electric Strength	31.6 / 29.1	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	7 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°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	260 - 280	°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): 260 - 280 °C

Mold temperature: 80 - 120 °C

Disclaimer