

Durethan® AKV30
PA66-GF30

Envalior

Injection Molding, 30% Glass Fiber Reinforced

ISO 1043 PA66-GF30

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	10600 / 7000	MPa	ISO 527
Stress at Break	185 / 125	MPa	ISO 527
Strain at Break	3 / 6	%	ISO 527
Impact Strength (Charpy), +23°C	90 / 90	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	70 / 70	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10 / 15	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10 / 10	kJ/m ²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	263 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	250 / *	°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	25 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	100 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-
UL recognition	yes / *	-	-
Burning Behav. at thickness h	HB / *	class	UL 94
Thickness tested	3.0 / *	mm	-
UL recognition	yes / *	-	-
Oxygen index	23 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4 / 10	-	IEC 62631-2-1
Relative permittivity, 1MHz	4 / 4	-	IEC 62631-2-1
Dissipation Factor, 100Hz	90 / 2700	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	180 / 800	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric Strength	40 / 35	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	5.5 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m ³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	146 / *	cm ³ /g	ISO 307, 1157, 1628

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

Additives

Release agent

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

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