

Durethan® BKV25H3.0 000000
PA6-GF25

Envalior

Injection Molding, 25% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF25

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	8500 / 5300	MPa	ISO 527
Stress at Break	160 / 95	MPa	ISO 527
Strain at Break	3.5 / 6	%	ISO 527
Tensile Creep Modulus, 1h	* / 4500	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	* / 3500	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	65 / 85	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	55 / 50	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10 / 15	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	200 / *	°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	30 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	5 / -	-	IEC 62631-2-1
Relative permittivity, 1MHz	4 / -	-	IEC 62631-2-1
Dissipation Factor, 100Hz	420 / -	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	330 / -	E-4	IEC 62631-2-1
Electric Strength	38 / 35	kV/mm	IEC 60243-1
Comparative tracking index	500 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	7.5 / *	%	Sim. to ISO 62
Humidity absorption	2.2 / *	%	Sim. to ISO 62
Density	1320 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	280	°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	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics

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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): 270 - 290 °C

Mold temperature: 80 - 120 °C