Durethan® ECOBKV35H2.0 901510

PA6-GF35 Envalior

Injection Molding, 35% Glass Reinforced, Heat Stabilized, Recycled Content

ISO 1043 PA6-GF35

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	11000 / 6500	MPa	ISO 527
Stress at Break	185 / 110	MPa	ISO 527
Strain at Break	3.3 / 6.5	%	ISO 527
Tensile Creep Modulus, 1h	* / 6000	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	* / 4900	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	90 / 100	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	75 / 70	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	12 / 20	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	1060 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	945 / -	N	ISO 6603-2
Puncture energy, +23°C	3.9 / -	J	ISO 6603-2
Puncture energy, -30°C	3.3 / -	J	ISO 6603-2
Flexural Modulus (23°C)	10500 / 6200	MPa	ISO 178
Flexural strength	290 / 180	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	15 / 20	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	10 / 10	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	80 / 90	kJ/m²	ISO 180/1U
Ball Indentation Hardness	230 / 120	MPa	ISO 2039-1

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)	205 / *	°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	95 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-
Oxygen index	23 / *	%	ISO 4589-1/-2
Glow Wire (GWFI, Flammability Index)	650	°C	IEC 60695-2-12
GWFI - thickness tested (1)	2	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Comparative tracking index	475 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.5 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1410 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

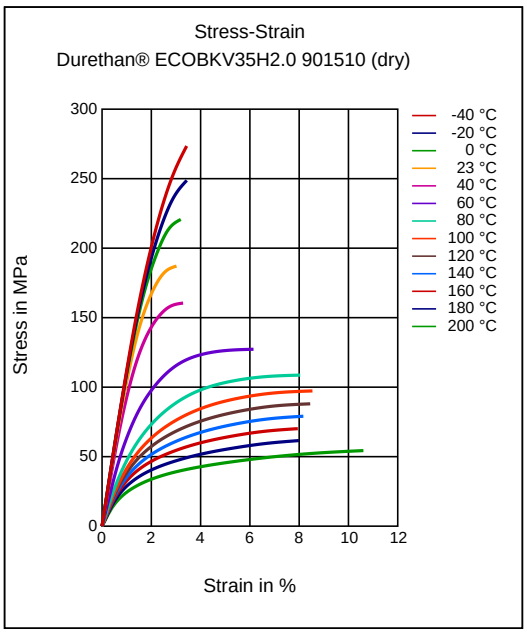
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	140 / *	cm³/g	ISO 307, 1157, 1628

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

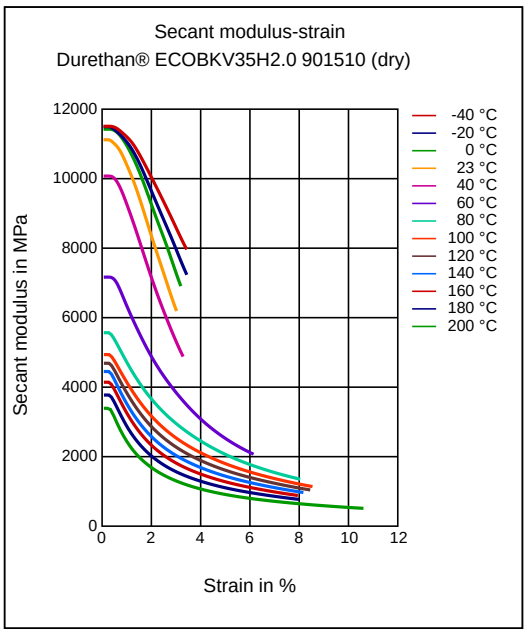
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Diagrams

Stress-strain



Secant modulus-strain



Characteristics

Processing
Injection Molding

Special Characteristics
Heat aging stabilized

Delivery form
Pellets

Features
Thermal Stability

Additives
Release agent

Certifications
Recycled Resin Content, ISCC Plus

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

Disclaimer

Liability Exclusion
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