

Durethan® AKV25H2.0 901510
PA66-GF25

Envalior

Injection Molding, 25% Glass Reinforced, Heat Stabilized

ISO 1043 PA66-GF25

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	9000 / 5700	MPa	ISO 527
Stress at Break	160 / 110	MPa	ISO 527
Strain at Break	3 / 6	%	ISO 527
Impact Strength (Charpy), +23°C	55 / 70	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	45 / 45	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10 / 11	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m ²	ISO 179/1eA
Flexural Modulus (23°C)	7100 / 4700	MPa	ISO 178
Notched Impact Strength (Izod)	10 / 10	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	8825 / 5600	MPa	ASTM D 638
Tensile Strength at Break	150 / 100	MPa	ASTM D 638
Flexural Modulus	7102 / 4702	MPa	ASTM D 790
Flexural Strength	260 / 165	MPa	ASTM D 790
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)	240 / *	°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	30 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	110 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
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
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E12	Ohm	IEC 62631-3-2
Electric Strength	40 / 35	kV/mm	IEC 60243-1
Comparative tracking index	400 / -	-	IEC 60112
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1320 / -	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

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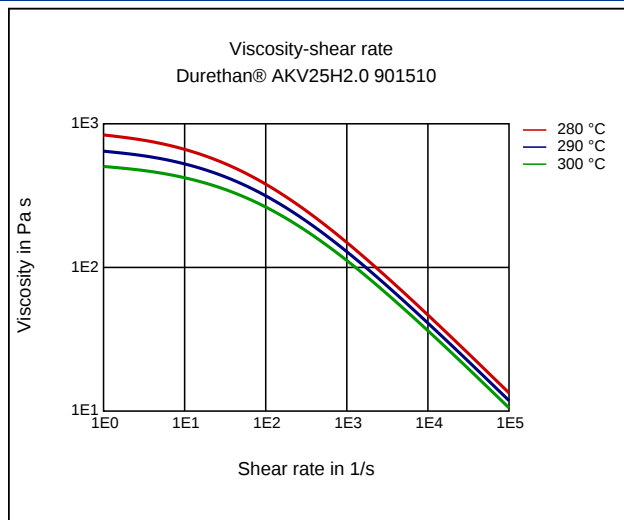
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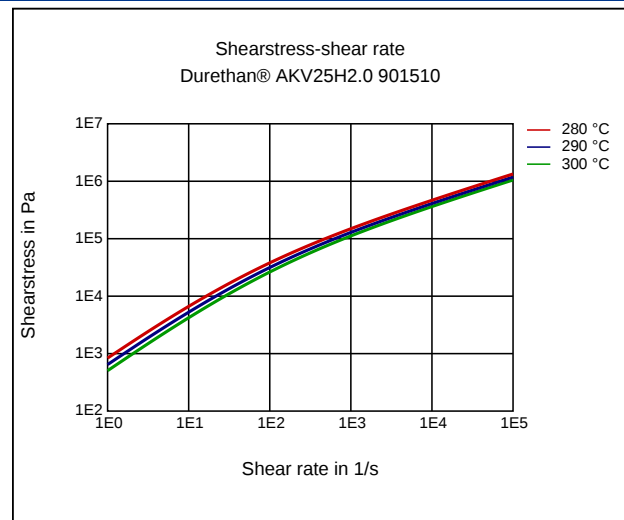
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 120	°C	-

Diagrams

Viscosity-shear rate



Shearstress-shear rate



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Heat aging stabilized

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