

Durethan® AKV40H3.0 000000
PA66-GF40

Envalior

Injection Molding, 40% Glass Reinforced, Heat Stabilized

ISO 1043 PA66-GF40

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
Mechanical Properties			
ISO Data			
Tensile Modulus	13000 / 8800	MPa	ISO 527
Stress at Break	220 / 145	MPa	ISO 527
Strain at Break	3 / 5	%	ISO 527
Tensile Creep Modulus, 1h	* / 7700	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	* / 6800	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	100 / 95	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	90 / 80	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 20	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10 / 12	kJ/m²	ISO 179/1eA
Thermal Properties			
ISO Data			
Melting Temperature (10°C/min)	262 / *	°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	20 / *	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			
ISO Data			
Relative permittivity, 100Hz	4.9 / -	-	IEC 62631-2-1
Relative permittivity, 1MHz	4 / -	-	IEC 62631-2-1
Dissipation Factor, 100Hz	270 / -	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	260 / -	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / -	Ohm*m	IEC 62631-3-1
Electric Strength	40 / -	kV/mm	IEC 60243-1
Comparative tracking index	575 / -	-	IEC 60112
Other Properties			
ISO Data			
Water Absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m³	ISO 1183
Test specimen production			
ISO Data			
Injection Molding, melt temperature	290	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Processing Recommendation Injection Molding			
Value			
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

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): 280 - 300 °C

Mold temperature: 80 - 120 °C

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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