

Durethan® BKV35HTS
PA6-GF35

Envalior

PA 6, injection molding grade, 35 % glass fibers, very good heat-ageing resistance

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	11500 / 6300	MPa	ISO 527
Stress at Break	190 / 85	MPa	ISO 527
Strain at Break	3 / 8	%	ISO 527
Impact Strength (Charpy), +23°C	75 / 85	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	65 / 55	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 / -	kJ/m²	ISO 179/1eA
Puncture energy, +23°C	9 / 13	J	ISO 6603-2
Puncture energy, -30°C	7 / 5	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	222 / *	°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
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.6 / *	mm	-
Burning Behav. at thickness h	HB / *	class	UL 94
Thickness tested	3.2 / *	mm	-
Oxygen index	23 / *	%	ISO 4589-1/-2

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	450 / -	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	265 / -	E-4	IEC 62631-2-1
Volume Resistivity	7E12 / -	Ohm*m	IEC 62631-3-1
Comparative tracking index	425 / -	-	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

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1200	kg/m³	-
Thermal Conductivity of Melt	0.236	W/(m K)	-
Spec. heat capacity of melt	2050	J/(kg K)	-
Eff. thermal diffusivity	9.61E-8	m²/s	-
Ejection temperature	140	°C	-

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

Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Injection Molding

PREPROCESSING

Max. Water content: 0.1 %

Drying temperature: 80 °C

Drying time:

Dry air dryer 2-20 h (will depend on the initial moisture content)

PROCESSING

Melt temperature: 270 - 290 °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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