Durethan® BC40SR2

PA6 — Envalior

PA 6, non-reinforced, injection moulding, impact modified

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2700 / 1200	MPa	ISO 527
Yield stress	70 / 40	MPa	ISO 527
Yield strain	4 / 30	%	ISO 527
Nominal strain at break	20 / >50	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	20 / 100	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	15 / 15	kJ/m²	ISO 179/1eA
Puncture energy, +23°C	150 / 30	J	ISO 6603-2
Puncture energy, -30°C	90 / -	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)	50 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	130 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	180 / *	°C	ISO 306
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	21 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4 / 14	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.3 / 4	-	IEC 62631-2-1
Dissipation Factor, 100Hz	125 / 1900	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	200 / 900	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric Strength	35 / 30	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	9 / *	%	Sim. to ISO 62
Humidity absorption	2.7 / *	%	Sim. to ISO 62
Density	1100 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Characteristics

Processing
Injection Molding

Special Characteristics
Impact modified, Heat aging stabilized

Delivery form
Pellets

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**

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