

Durethan® BM430H2.0 901510
PA6-MX30

Envalior

Injection Molding, 30% Mineral Reinforced, Heat Stabilized, Low Warpage

ISO 1043 PA6-MX30

Rheological properties

	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	1.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577

Mechanical Properties

	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	4700 / 1450	MPa	ISO 527
Stress at Break	70 / -	MPa	ISO 527
Strain at Break	5 / -	%	ISO 527
Impact Strength (Charpy), +23°C	75 / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	60 / 50	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 10	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	1400 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	820 / -	N	ISO 6603-2
Puncture energy, +23°C	2.5 / -	J	ISO 6603-2
Puncture energy, -30°C	1.5 / -	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)	75 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	175 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	80 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	70 / *	E-6/K	ISO 11359-1/-2

Other Properties

	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	7.1 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1370 / -	kg/m³	ISO 1183

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 - 100	°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): 270 - 290 °C

Mold temperature: 80 - 100 °C