

Durethan® AC30 000000 DUS027
PA66-I

Envalior

Injection Molding, Unreinforced, Heat Stabilized, Improved Impact

ISO 1043 PA66-I

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	27 / *	cm ³ /10min	ISO 1133
Temperature	270 / *	°C	-
Load	2.16 / *	kg	-
Molding shrinkage, parallel	1.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	3000 / 1100	MPa	ISO 527
Yield stress	70 / 40	MPa	ISO 527
Yield strain	6.5 / 25	%	ISO 527
Nominal strain at break	20 / >50	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / no break	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 25	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m ²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	261 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	70 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	195 / *	°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	110 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1110 / -	kg/m ³	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 - 90	°C	-

Characteristics
Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Impact modified, Heat aging stabilized

Injection Molding
PREPROCESSING

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

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Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 270 - 290 °C

admissible residence time at Tmax ≤ 10 min

Mold temperature: 80 - 90 °C
