Durethan® AC30 000000 DUS027

PA66-I — Envalior

Product Texts

Injection Molding, Unreinforced, Heat Stabilized, Improved Impact

ISO 1043 PA66-I

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**27 / ***	cm³/10min	ISO 1133
Temperature	**270 / ***	°C	-
Load	**2.16 / ***	kg	-
[C] Molding shrinkage, parallel	**1.3 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.8 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**3000 / 1100**	MPa	ISO 527
[C] Yield stress	**70 / 40**	MPa	ISO 527
[C] Yield strain	**6.5 / 25**	%	ISO 527
[C] Nominal strain at break	**20 / >50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N / N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N / N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**- / 25**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**- / 10**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**261 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**70 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**195 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**80 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**110 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**1.5 / ***	mm	-
[C] Burning rate, FMVSS, Thickness 1 mm	**31.2**	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Density	**1110 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**280**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294

[C]: CAMPUS

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

Delivery form
Pellets

Additives
Release agent

Special Characteristics
High impact or impact modified, Heat stabilized or stable to heat

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

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
admissible residence time at Tmax <=10 min
Mold temperature: 80 - 90 °C