

Durethan[®] AC30 DUS027

PA66–I

Injection Molding, Unreinforced, Heat Stabilized, Improved Impact

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	1.3 / *	%	ISO 294–4
Molding shrinkage (normal)	1.8 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	3000 / 1100	MPa	ISO 527–1/–2
Nominal strain at break	20 / >50	%	ISO 527–1/–2
Yield stress	70 / 40	MPa	ISO 527–1/–2
Yield strain	6.5 / 25	%	ISO 527–1/–2
Flexural modulus	2600 / 1000	MPa	ISO 178
Flexural strength	100 / 40	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / 25	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	<10 / <10	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	<10 / 25	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
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)	0.8 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1.1 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695–11–10

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10

<i>OTHER PROPERTIES</i>	<i>DRY / COND</i>		
Density	1110 / –	kg/m ³	ISO 1183

<i>PROCESSING RECOMMENDATIONS</i>	<i>VALUE</i>		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2–6	h	
Residual moisture content	0.03–0.12	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	270–290	°C	
Mold temperature	80–90	°C	
admissible residence time at Tmax	<10	min	