

# Durethan<sup>®</sup> DP2325H3.0

## PA66–I

Injection Molding, Unreinforced, Heat Stabilized, Improved Impact

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b>RHEOLOGICAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	2.1 / *	%	ISO 294–4
Molding shrinkage (normal)	1.9 / *	%	ISO 294–4
<b>MECHANICAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Tensile modulus	1850 / 700	MPa	ISO 527–1/–2
Nominal strain at break	50 / 50	%	ISO 527–1/–2
Yield stress	50 / 30	MPa	ISO 527–1/–2
Yield strain	30 / 35	%	ISO 527–1/–2
Flexural modulus	1800 / 700	MPa	ISO 178
Flexural strength	70 / 30	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	90 / 100	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (–30°C)	25 / 20	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	85 / 100	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Melting temperature (10°C/min)	263 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	65 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	130 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	1.3 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1.3 / *	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
Oxygen index	20 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	650 / –	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	2 / –	mm	IEC 60695-2-12

### ***ELECTRICAL PROPERTIES***

#### ***DRY / COND***

Relative permittivity (100Hz)	3.5 / 7	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3 / 3.4	–	IEC 62631-2-1
Dissipation factor (100 Hz)	80 / 1500	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	150 / 750	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric strength	40 / 45	kV/mm	IEC 60243-1
Comparative tracking index	600 / –	V	IEC 60112

### ***OTHER PROPERTIES***

#### ***DRY / COND***

Water absorption	7 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1080 / –	kg/m <sup>3</sup>	ISO 1183

### ***PROCESSING RECOMMENDATIONS***

#### ***VALUE***

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	80-100	°C	