

**Durethan® DP1802H3.0**

PA6

Envalior

PA 6, non-reinforced, extrusion, injection moulding, halogen free flame retardant, impact modified

Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	260 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	1.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2500 / 750	MPa	ISO 527
Yield stress	65 / 30	MPa	ISO 527
Yield strain	3.9 / 25	%	ISO 527
Impact Strength (Charpy), +23°C	125 / no break	kJ/m <sup>2</sup>	ISO 179/1eU

Thermal Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	58 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	156 / *	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-2 / *	class	UL 94
Thickness tested	1.6 / *	mm	-
Burning Behav. at thickness h	V-2 / *	class	UL 94
Thickness tested	0.8 / *	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Electric Strength	34 / -	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	8 / *	%	Sim. to ISO 62
Density	1120 / -	kg/m <sup>3</sup>	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density of melt	970	kg/m <sup>3</sup>	-
Thermal Conductivity of Melt	0.183	W/(m K)	-
Spec. heat capacity of melt	2700	J/(kg K)	-
Eff. thermal diffusivity	7E-8	m <sup>2</sup> /s	-
Ejection temperature	140	°C	-

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

**Characteristics**
**Processing**

Injection Molding, Other Extrusion

**Delivery form**

Pellets

**Additives**

Lubricants, Plasticizer

**Special Characteristics**

Flame retardant, Light stabilized or stable to light, Heat aging stabilized