Durethan® BLUEB31F 000000

PA6 — Envalior

Film Extrusion, Unreinforced, Extrusion, Food Contact Quality, Low Viscosity, no additives

ISO 1043 PA6

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2800 / 800	MPa	ISO 527
Yield stress	75 / 35	MPa	ISO 527
Yield strain	4 / 25	%	ISO 527
Nominal strain at break	20 / >50	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / 55	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	5 / 50	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	5 / -	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	50 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	150 / *	°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	80 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-
Oxygen index	24 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.9 / 18	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.5 / 4	-	IEC 62631-2-1
Volume Resistivity	1E12 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric Strength	30 / 35	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	10 / *	%	Sim. to ISO 62
Humidity absorption	3 / *	%	Sim. to ISO 62
Density	1140 / -	kg/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	155 / *	cm³/g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	40	°C	ISO 294

Characteristics

Processing
Film Extrusion, Other Extrusion, Coating

Certifications
Recycled Resin Content, Food approval

Delivery form
Pellets

Applications
Monofilament, Multifilament

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): 260 - 280 °C

Mold temperature: 80 - 100 °C

Disclaimer