



ERTALON 6 PLA

Properties	Test Methods	Units	Values
Density	ISO 1183-1	g/cm ³	1.15
Water absorption:			
- after 24/96 hrs immersion in water of 23°C	ISO 62	mg	44 / 83
	ISO 62	%	0.65 / 1.22
- at saturation in air of 23°C / 50% RH	-	%	2.2
- at saturation in water of 23°C	-	%	6.5
Thermal Properties			
Melting temperature (DSC, 10°C/min)	ISO 11357-1/-3	°C	215
Glass transition Temperature (DSC, 20°C.min)	ISO 11357-1/-2	°C	-
Thermal conductivity at 23°C	-	W/(m.K)	0.29
Coefficient of linear thermal expansion:			
- average value between 23°C and 60°C	-	m/(m.K)	80 x 10 ⁻⁶
- average value between 23°C and 100°C	-	m/(m.K)	90 x 10 ⁻⁶
Temperature of deflection under load:			
- method A: 1.8 Mpa	+ ISO 75-1/-2	°C	80
Max. allowable service temperature in air:			
- for short periods	-	°C	170
- continuously: for 5,000 / 20,000 hrs	-	°C	105 / 90
Min. service temperature	-	°C	-30
Flammability:			
- "Oxygen Index"	ISO 4589-1/-2	%	25
- according to UL 94 (3 / 6mm thickness)	-	-	HB / HB
Mechanical Properties at 23°C			
Tension test:			
- tensile stress at yield / tensile stress at break	+ ISO 527-1/-2	MPa	86 / -
	++ ISO 527-1/-2	MPa	55 / -
- tensile strength	+ ISO 527-1/-3	MPa	88
- tensile strain at yeild	+ ISO 527-1/-4	%	5
- tensile strain at break	+ ISO 527-1/-5	%	25
	++ ISO 527-1/-6	%	>50
- tensile modulus of elasticity	+ ISO 527-1/-7	MPa	3600
	++ ISO 527-1/-8	MPa	1750
Compression test			
- compressive stress at 1 / 2 / 5 % nominal strain	+ ISO 604	MPa	34 / 64 / 93
Charpy impact strength - Unnotched	+ ISO 179-1/1eU	kJ/m ²	no break
Charpy impact strength - Notched	+ ISO 179-1/1eA	kJ/m ²	3
Ball indentation hardness	+ ISO 2039-1	N/mm ²	165
Rockwell hardness	+ ISO 2039-2	-	M 88

For latest datasheets,
visit our website:

aiplastics.com

While the information on this data sheet is believed to be correct at the time of publication, it is the customer's responsibility to ensure the correct use and application of this product. The buyer undertakes all liability in respect of the application, processing or use of this information or product, whose quality and other properties he shall verify, or any consequence thereof.



ERTALON 6 PLA

Electrical Properties at 23°C		Test Methods	Units	Values
Electric strength	+	IEC 60243-1	kV/mm	25
	++	IEC 60243-1	kV/mm	17
Volume resistivity	+	IEC 60093	Ohm.cm	>10 ¹⁴
	++	IEC 60093	Ohm.cm	>10 ¹²
Surface resistivity	+	IEC 60093	Ohm	>10 ¹³
	++	IEC 60093	Ohm	>10 ¹²
Relative permittivity ϵ_r : - at 100 Hz	+	IEC 60250	-	3.6
	++	IEC 60250	-	6.6
Relative permittivity ϵ_r : - at 1 MHz	+	IEC 60250	-	3.2
	++	IEC 60250	-	3.7
Dielectric dissipation factor $\tan \delta$: - at 100 Hz	+	IEC 60250	-	0.012
	++	IEC 60250	-	0.14
Dielectric dissipation factor $\tan \delta$: - at 1 MHz	+	IEC 60250	-	0.016
	++	IEC 60250	-	0.05
Comparative tracking index (CTI)	+	IEC 60112	-	600
	++	IEC 60112	-	600

+ : values referring to dry materials

++ : values referring to material in equilibrium with the standard atmosphere 23oC / 50 % (mostly derived from literature)

For latest datasheets,
visit our website:

aiplastics.com

While the information on this data sheet is believed to be correct at the time of publication, it is the customer's responsibility to ensure the correct use and application of this product. The buyer undertakes all liability in respect of the application, processing or use of this information or product, whose quality and other properties he shall verify, or any consequence thereof.