Quadrant EPP ERTALON® 6 PLA

Polyamide 6

Quadrant Engineering Plastic Products

Message:

Quadrant EPP ERTALON® 6 PLA is a Polyamide 6 (Nylon 6) product. It is available in Europe.
Characteristics include:
Flame Rated
Creep Resistant
Good Stiffness
Heat Resistant
High Hardness

General Information	
Features	Good Creep Resistance
	Good Heat Aging Resistance
	Good Stiffness
	Good Wear Resistance
	High Hardness
	High Strength
	Machinable
Appearance	Black
	Natural Color
Forms	Customizable Forms
	Disc
	Preformed Parts
	Rod
	Tubing

Physical	Dry	Conditioned	Unit	Test Method
Density	1.15	--	g/cm³	ISO 1183
Water Absorption				ISO 62
23°C, 24 hr, 3.00 mm	0.65	--	%	
Saturation, 23°C	6.5	--	%	
Equilibrium, 23°C, 50% RH	2.2	--	%	
Water Absorption				ISO 62
23°C, 3.00 mm [1]	1.2	--	%	
23°C, 3.00 mm [2]	83.0	--	mg	
23°C, 3.00 mm [3]	44.0	--	mg	
Service Temperature - Minimum	-30	--	°C	

Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness (M-Scale, 10.0 mm)	88	--		ISO 2039-2
Ball Indentation Hardness (10.0 mm)	165	--	MPa	ISO 2039-1
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	3500	1700	MPa	ISO 527-2/1B/1
Tensile Stress (Yield)	85.0	55.0	MPa	ISO 527-2/1B/20
Tensile Strain (Break)	25	> 50	%	ISO 527-2/1B/20
Tensile Creep Modulus (1000 hr)	22.0	10.0	MPa	ISO 899-1
Compressive Stress				ISO 604/1
5% Strain	92.0	--	MPa	
2% Strain	51.0	--	MPa	
1% Strain	26.0	--	MPa	
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	3.5	--	kJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength	No Break	--		ISO 179/1eU
Notched Izod Impact Strength	3.5	7.0	kJ/m^2	ISO 180/2A
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	80.0	--	°C	ISO 75-2/A
Continuous Use Temperature				
-- [4]	90.0	--	°C	
-- [5]	105	--	°C	
-- [6]	170	--	°C	
Melting Temperature (DSC)	220	--	°C	
CLTE - Flow				
23 to 60°C	8.0E-5	--	cm/cm/°C	
23 to 100°C	9.0E-5	--	cm/cm/°C	
Thermal Conductivity (23°C)	0.29	--	W/m/K	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+13	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+14	> 1.0E+12	ohms·cm	IEC 60093
Electric Strength (1.00 mm, in Oil)	25	17	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
100 Hz	3.60	6.60		
1 MHz	3.20	3.70		
Dissipation Factor				IEC 60250

100 Hz	0.012	0.14		
1 MHz	0.016	0.050		
Comparative Tracking Index	600	600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
3.00 mm	HB	--		
6.00 mm	HB	--		
Oxygen Index	25	--	%	ISO 4589-2

NOTE	
1.	96 hrs
2.	Weight, 96 hrs
3.	Weight, 24 hrs
4.	20000 hrs
5.	5000 hrs
6.	Short periods

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China