Quadrant EPP CESTILITE ASTL

Ultra High Molecular Weight Polyethylene

Quadrant Engineering Plastic Products

Message:

Quadrant EPP CESTILITE ASTL is an Ultra High Molecular Weight Polyethylene product. It is available in Europe. Typical application: Outdoor Applications.
Characteristics include:
Flame Rated
Antistatic
Good Toughness
Good UV Resistance
UV Stabilized

General Information	
Additive	Antistatic UV Stabilizer
Features	Antistatic Good Abrasion Resistance Good Toughness Good UV Resistance
Uses	Outdoor Applications
Appearance	Black
Forms	Disc Preformed Parts Rod Sheet

Physical	Nominal Value	Unit	Test Method
Density	0.950	g/cm³	ISO 1183
Water Absorption (Saturation, 23°C, 1.00 mm)	0.050	%	ISO 62
Molecular Weight	7000000	g/mol	
Service Temperature - Minimum	-150	°C	
Relative Weight Loss			Internal Method
-- [1]	85.0		
-- [2]	80.0		

Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D, 3 sec	63		
Shore D, 15 sec	61		
Ball Indentation Hardness	37.0	MPa	ISO 2039-1

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	770	MPa	ISO 527-2/1B/1
Tensile Stress (Yield)	20.0	MPa	ISO 527-2/1B/50
Tensile Strain (Yield)	15	%	ISO 527-2/1B/50
Nominal Tensile Strain at Break	> 50	%	ISO 527-2/1B/50
Compressive Stress			ISO 604/1
5% Strain	15.0	MPa	
2% Strain	9.00	MPa	
1% Strain	5.00	MPa	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			
-- [3]	> 90	kJ/m^2	Internal Method
Partial Break	80	kJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength	No Break		ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	42.0	°C	ISO 75-2/A
Continuous Use Temperature			
-- [4]	80.0	°C	
-- [5]	120	°C	
Vicat Softening Temperature	83.0	°C	ISO 306/B
Melting Temperature	130 to 135	°C	ISO 11357-3
CLTE - Flow (23 to 100°C)	2.0E-4	cm/cm/°C	
Thermal Conductivity (23°C)	0.40	W/m/K	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+6	ohms	IEC 60093
Volume Resistivity	> 1.0E+6	ohms·cm	IEC 60093
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.60 mm)	HB		UL 94
Oxygen Index	< 20	%	ISO 4589-2
NOTE			
1.	Wear test in sand/water slurry		
2.	Wear test on plastics pin on rotating steel disk-tribo system		
3.	Double 15° notch, DIS 11542-2		
4.	20000 hrs		
5.	Short periods		

Recommended distributors for this material

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