

Quadrant EPP CESTILENE HD 1000

Ultra High Molecular Weight Polyethylene

Quadrant Engineering Plastic Products

Message:

Quadrant EPP CESTILENE HD 1000 is an Ultra High Molecular Weight Polyethylene product. It is available in Europe. Applications of Quadrant EPP CESTILENE HD 1000 include bottles, construction applications, electrical/electronic applications, fabrics/fibers and industrial applications.

Characteristics include:

- Flame Rated
- Impact Resistant
- Wear Resistant
- High Molecular Weight

General Information			
Features	Good Abrasion Resistance		
	Good Wear Resistance		
	High Impact Resistance		
	Low Temperature Impact Resistance		
	Ultra High Molecular Weight		
Uses	Bottles		
	Construction Applications		
	Electrical/Electronic Applications		
	Industrial Applications		
	Machinery Maintenance/Repair		
	Textile Applications		
Appearance	Black		
	Green		
	White		
Forms	Disc		
	Preformed Parts		
	Rod		
	Sheet		
Physical	Nominal Value	Unit	Test Method
Density	0.930	g/cm ³	ISO 1183
Water Absorption (Saturation, 23°C, 1.00 mm)	0.010	%	ISO 62
Molecular Weight	4500000	g/mol	
Service Temperature - Minimum	-200	°C	
Relative Weight Loss			Internal Method

-- 1	100		
-- 2	100		
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D, 3 sec	62		
Shore D, 15 sec	60		
Ball Indentation Hardness	36.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	750	MPa	ISO 527-2/1B/1
Tensile Stress (Yield)	19.0	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	14.0	MPa	
2% Strain	8.00	MPa	
1% Strain	4.50	MPa	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			
-- 3	> 170	kJ/m ²	Internal Method
Partial Break	110	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	80.0	°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+13	ohms	IEC 60093
Volume Resistivity	> 1.0E+14	ohms · cm	IEC 60093
Electric Strength (1.00 mm, in Oil)	45	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	2.10		
1 MHz	3.00		
Dissipation Factor			IEC 60250
100 Hz	4.0E-4		
1 MHz	1.0E-3		
Comparative Tracking Index	600	V	IEC 60112

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 |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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



WECHAT