Quadrant EPP TIVAR® 1000 ESD

Ultra High Molecular Weight Polyethylene

Quadrant Engineering Plastic Products

Message:

Quadrant EPP TIVAR® 1000 ESD is an Ultra High Molecular Weight Polyethylene product. It is available in North America. Typical application: Electrical/Electronic Applications.
Characteristics include:
Flame Rated
Chemical Resistant
Antistatic
High Molecular Weight

General Information	
Additive	Antistatic
Features	Acid Resistant Alcohol Resistant Alkali Resistant Antistatic Hydrocarbon Resistant Machinable Solvent Resistant Ultra High Molecular Weight
Uses	Electrical/Electronic Applications
Forms	Preformed Parts Profiles Rod Sheet Tubing

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.940	g/cm³	ASTM D792
Water Absorption			ASTM D570
24 hr	< 0.010	%	
Saturation	< 0.010	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	66		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	800	MPa	ASTM D638
Tensile Strength (Ultimate)	40.0	MPa	ASTM D638
Tensile Elongation (Break)	300	%	ASTM D638
Flexural Modulus	800	MPa	ASTM D790

Flexural Strength (Yield)	26.2	MPa	ASTM D790
Compressive Modulus	689	MPa	ASTM D695
Compressive Strength (10% Strain,23°C)	22.8	MPa	ASTM D695
Shear Strength	33.1	MPa	ASTM D732
Coefficient of Friction (vs. Steel - Static)	0.12		Internal Method
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	No Break		ASTM D256A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	46.7	°C	ASTM D648
Maximum Use Temperature - Long Term, Air	82	°C	
Limiting Pressure Velocity [1]	0.0701	MPa·m/s	Internal Method
Peak Crystallization Temperature (DSC)	135	°C	ASTM D3418
CLTE - Flow [2] (-40 to 149°C)	3.6E-4	cm/cm/°C	ASTM E831
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+5 to 1.0E+9	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (3.18 mm, Estimated Rating)	HB		UL 94
NOTE			
1.	4:1 safety factor		
2.	68°F		

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