

Quadrant EPP Semitron® ESd 225 POM-C, static dissipative, extruded (ISO Data)

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer, Unreinforced

Material Notes:

Semitron ESd 225 is an acetal based static dissipative material ideal for material handling operations. It is also an excellent choice for fixturing used in the manufacturing of hard disk drives or for handling in-process silicon wafers Surface resistivity: 1010 - 1012 ohms/sq. Thermal performance to 107 °C (225 °F) Good wear resistance

Order this product through the following link:

http://www.lookpolymers.com/polymer_Quadrant-EPP-Semitron-ESd-225-POM-C-static-dissipative-extruded-ISO-Data.php

Physical Properties	Metric	English	Comments
Density	1.33 g/cc	0.0480 lb/in ³	ISO 1183-1
Moisture Absorption at Equilibrium	0.80 %	0.80 %	50% RH
Water Absorption at Saturation	10 %	10 %	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	106	106	ISO 2039-2
Hardness, Shore D	75	75	
Ball Indentation Hardness	70.0 MPa	10200 psi	ISO 2039-1
Tensile Strength	38.0 MPa	5510 psi	at Break (NYP); ISO 527-1/-2
Elongation at Break	15 %	15 %	ISO 527-1/-2
Tensile Modulus	1.50 GPa	218 ksi	ISO 527-1/-2
Flexural Strength	50.0 MPa	7250 psi	
Compressive Strength	14.0 MPa	2030 psi	ISO 604
	@Strain 1 %	@Strain 1 %	
	25.0 MPa	3630 psi	ISO 604
	@Strain 2 %	@Strain 2 %	
	38.0 MPa	5510 psi	ISO 604
	@Strain 5 %	@Strain 5 %	
Charpy Impact Unnotched	NB	NB	ISO 179-1/1eU
Charpy Impact, Notched	0.800 J/cm ²	3.81 ft-lb/in ²	ISO 179-1/1eA

Thermal Properties	Metric	English	Comments
CTE, linear	150 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	83.3 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
	@Temperature 23.0 - 100 $^{\circ}\text{C}$	@Temperature 73.4 - 212 $^{\circ}\text{F}$	
Melting Point	165 $^{\circ}\text{C}$	329 $^{\circ}\text{F}$	DSC, 10 $^{\circ}\text{C}/\text{min}.$; ISO 11357-1/-3
Maximum Service Temperature, Air	90.0 $^{\circ}\text{C}$	194 $^{\circ}\text{F}$	Continuous
Deflection Temperature at 1.8 MPa (264 psi)	107 $^{\circ}\text{C}$	225 $^{\circ}\text{F}$	ASTM D648
Flammability, UL94	HB	HB	
Oxygen Index	$\leq 20\%$	$\leq 20\%$	ISO 4589-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.0e+9 - 1.0e+11 ohm-cm	1.0e+9 - 1.0e+11 ohm-cm	IEC 60093
Surface Resistivity per Square	1.0e+9 - 1.0e+11 ohm	1.0e+9 - 1.0e+11 ohm	IEC 60093

Compliance Properties	Metric	English	Comments
3A-Dairy	No	No	
European Food 1935/2004	No	No	
FDA	No	No	
USP Class VI	No	No	

Chemical Resistance Properties	Metric	English	Comments
Acids, Strong (pH 1-3)	Unacceptable	Unacceptable	
Acids, Weak	Limited	Limited	
Alcohols	Acceptable	Acceptable	
Alkalies, Strong (pH 11-14)	Unacceptable	Unacceptable	
Alkalies, Weak	Acceptable	Acceptable	
Chlorinated Solvents	Limited	Limited	
Conductive / Static Dissipative	Yes	Yes	
Continuous Sunlight	Limited	Limited	
Hot Water / Steam	Limited	Limited	

Chemical Resistance Properties	Metric	English	Comments
Hydrocarbons - Aliphatic	Acceptable	Acceptable	
Hydrocarbons - Aromatic	Acceptable	Acceptable	
Inorganic Salt Solutions	Acceptable	Acceptable	
Ketones, Esters	Acceptable	Acceptable	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China