


Semitron® ESd 225 Copolymer acetal, static dissipative, extruded

Semitron® ESd 225 is ideal for fixturing used in the manufacturing of hard disk drives or for handling in-process

silicon wafers. It is tan in color

- Surface resistivity: $10^{10} - 10^{12}$ /sq
- Thermal performance to 225°F (107°C)
- Good wear resistance

Extruded	Rod	Disc	Plate	Tubular Bar	Other
Semitron® ESd 225 POM	.187"-4.0"	-	.250"- 2.0" (A)	Quote Upon Request	-

Key: A = 12" wide x 24" long

MECHANICAL PROPERTIES

	VALUES	ASTM/COMMENTS
Specific Gravity	1.33	D792
Tensile Strength, psi	5400	D638
Tensile Modulus, psi	200000	D638
Elongation, %	15	D638
Flexural Strength, psi	7300	D790
Flexural Modulus, psi	220000	D790
Compressive Strength, psi	8000	D695, 10% Def.
Compressive Modulus, psi	175000	D695
Hardness, Rockwell M	50	D785
Hardness, Rockwell R	108	D785
Izod Impact (Notched), ft-lb/in	1.5	D256 Type A
Coefficient of Friction, Dynamic	0.29	Dry vs. Steel, PTM55007
Limiting PV, psi-fpm	2000	PTM55010
k (wear) factor, 10-10in3-min/lb-ft-hr	30	PTM55010

THERMAL PROPERTIES

Coefficient of Thermal Expansion, 10E-4/°F	0.9	E831 (TMA)
Deflection Temperature 264 psi, °F	225	D648
Melting Point (Crystalline) Peak, °F	320	D3418
Continuous Service in Air (Max), °F	180	Without Load

ELECTRICAL PROPERTIES

Volume Resistivity, Ohm-cm	1E+10	D257
Dielectric Constant, 1 MHz	4.2	1 MHz, ASTM D150(2)

CHEMICAL PROPERTIES

Water Absorption Immersion, 24 hr., %	2	24 hour immersion
Water Absorption Immersion Sat, %	7.2	saturation immersion
Acids, Weak (acetic, dilute HCl)	2	Limited Service
Acids, Strong (conc. HCl or sulfuric)	1	Unacceptable
Alkalies, Weak (dilute NaOH)	3	Acceptable Service
Alkalies, Strong (conc. NaOH)	1	Unacceptable
Hydrocarbons, Aromatic (toluene)	3	Acceptable Service
Hydrocarbons, Aliphatic (gasoline)	3	Acceptable Service
Ketones, Esters (acetone)	3	Acceptable Service
Ethers (diethyl ether, THF)	3	Acceptable Service
Chlorinated Solvents (methylene chloride)	3	Acceptable Service
Alcohols (methanol, anti-freeze)	3	Acceptable Service
Inorganic Salt Solutions (NaCl, KCl)	3	Acceptable Service
Continuous Sunlight	2	Limited Service
Steam	2	Limited Service

COMPLIANCE

Flammability, UL94 (5=V-0; 4=V-1; 3=V-2; 1=HB)	1 (HB)	HB UL 94		
FDA (1=Yes)	0	Not Compliant	USP Class VI (1=Yes)	0 Not Compliant
USDA (1=Yes)	0	Not Compliant	3A-Dairy (1=Yes)	0 Not Compliant
Canada AG (1=Yes)	0	Not Compliant	NSF (1=Yes)	0 Not Compliant