Quadrant EPP Ertacetal® H POM-H, extruded (ISO Data)

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

Material Notes:

Ertacetal H is Quadrant's homopolymer acetal grade. It offers a higher mechanical strength, stiffness, hardness and creep resistance as well as a lower thermal expansion rate and often also a better wear resistance than the acetal copolymer. High mechanical strength, stiffness and hardness Excellent resilience Good creep resistance High impact strength, even at low temperatures Very good dimensional stability (low water absorption) Good sliding properties and wear resistance Excellent machinability Good electrical insulating and dielectric properties Physiologically inert (most grades are suitable for food contact) Not self-extinguishing

Order this product through the following link:
http://www.lookpolymers.com/polymer_Quadrant-EPP-Ertacetal-H-POM-H-extruded-ISO-Data.php

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in³	ISO 1183-1
Moisture Absorption at Equilibrium	0.20 %	0.20 %	50% RH
Water Absorption at Saturation	0.80 %	0.80 %	
Outgassing - Total Mass Loss	0.47 %	0.47 %	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	88	88	ISO 2039-2
Hardness, Shore D	81	81	
Ball Indentation Hardness	160 MPa	23200 psi	ISO 2039-1
Tensile Strength	78.0 MPa	11300 psi	at Yield; ISO 527-1/-2
Elongation at Break	50 %	50 %	ISO 527-1/-2
Elongation at Yield	40 %	40 %	ISO 527-1/-2
Tensile Modulus	3.30 GPa	479 ksi	ISO 527-1/-2
Flexural Strength	106 MPa	15400 psi	
Flexural Modulus	3.45 GPa	500 ksi	
Compressive Strength	29.0 MPa @Strain 1 %	4210 psi @Strain 1 %	ISO 604
	49.0 MPa @Strain 2 %	7110 psi @Strain 2 %	ISO 604
	85.0 MPa	12300 psi	

Mechanical Properties	Metric	English	Comments
	@Strain 5 %	@Strain 5 %	ISO 604
Charpy Impact Unnotched	NB	NB	ISO 179-1/1eU
Charpy Impact, Notched	1.00 J/cm²	4.76 ft-lb/in²	ISO 179-1/1eA
Coefficient of Friction, Dynamic	0.30 - 0.45	0.30 - 0.45	
Limiting Pressure Velocity	0.100 MPa-m/sec	2860 psi-ft/min	at 1 m/s unlubricated
	0.160 MPa-m/sec	4570 psi-ft/min	at 0.1 m/s unlubricated

Thermal Properties	Metric	English	Comments
CTE, linear	110 µm/m-°C @Temperature 23.0 - 100 °C	61.1 µin/in-°F @Temperature 73.4 - 212 °F	
Thermal Conductivity	0.310 W/m-K	2.15 BTU-in/hr-ft²-°F	
Melting Point	180 °C	356 °F	DSC, 10°C/min.; ISO 11357-1/-3
Maximum Service Temperature, Air	90.0 °C	194 °F	Continuous; 20,000 h
	105 °C	221 °F	Continuous; 5,000 h
Deflection Temperature at 1.8 MPa (264 psi)	110 °C	230 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	
Oxygen Index	15 %	15 %	ISO 4589-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.0e+14 ohm-cm	>= 1.0e+14 ohm-cm	IEC 60093
Surface Resistivity per Square	>= 1.0e+13 ohm	>= 1.0e+13 ohm	IEC 60093
Dielectric Constant	3.8 @Frequency >=100000 Hz	3.8 @Frequency >=100000 Hz	IEC 60250
Dielectric Strength	20.0 kV/mm	508 kV/in	
Dissipation Factor	0.0030 @Frequency 100000 Hz	0.0030 @Frequency 100000 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Compliance Properties	Metric	English	Comments

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	Limited	Limited	
Chlorinated Solvents	Limited	Limited	
Continuous Sunlight	Limited	Limited	
Hot Water / Steam	Limited	Limited	
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