

Quadrant EPP Fluorosint® 500 PTFE + mica, compression moulded (ISO Data)

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE , Polytetrafluoroethylene (PTFE), Mica Filled

Material Notes:

Reinforced with a proprietary synthetic mica, this material exhibits, in addition to its inherent outstanding chemical and hydrolysis resistance, very good mechanical and tribological properties High maximum allowable service temperature in air (260°C continuously) Excellent chemical and hydrolysis resistance Outstanding UV- and weather resistance Physiologically inert (suitable for food contact, except Fluorosint 500, Fluorosint MT-01) Inherent low flammability Good electrical insulating properties

Order this product through the following link:

http://www.lookpolymers.com/polymer_Quadrant-EPP-Fluorosint-500-PTFE-mica-compression-moulded-ISO-Data.php

Physical Properties	Metric	English	Comments
Density	2.32 g/cc	0.0838 lb/in ³	ISO 1183-1
Moisture Absorption at Equilibrium	<= 0.10 %	<= 0.10 %	50% RH
Water Absorption at Saturation	1.5 - 2.5 %	1.5 - 2.5 %	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	55	55	ISO 2039-2
Hardness, Shore D	65	65	
Ball Indentation Hardness	60.0 MPa	8700 psi	ISO 2039-1
Tensile Strength	7.00 MPa	1020 psi	at Yield; ISO 527-1/-2
Elongation at Break	15 %	15 %	ISO 527-1/-2
Elongation at Yield	5.0 %	5.0 %	ISO 527-1/-2
Tensile Modulus	1.75 GPa	254 ksi	ISO 527-1/-2
Flexural Strength	13.0 MPa	1890 psi	
Compressive Strength	12.0 MPa	1740 psi	ISO 604
	@Strain 1 %	@Strain 1 %	
	19.0 MPa	2760 psi	ISO 604
	@Strain 2 %	@Strain 2 %	
	25.0 MPa	3630 psi	ISO 604
	@Strain 5 %	@Strain 5 %	
K Factor (ISO)	12 µm/km	12 µm/km	
Charpy Impact Unnotched	0.800 J/cm ²	3.81 ft-lb/in ²	ISO 179-1/1eU

Mechanical Properties	Metric	English	Comments
Coefficient of Friction, Dynamic	0.20 - 0.30	0.20 - 0.30	
Limiting Pressure Velocity	0.250 MPa-m/sec	7140 psi-ft/min	at 1 m/s unlubricated
	0.400 MPa-m/sec	11400 psi-ft/min	at 0.1 m/s unlubricated

Thermal Properties	Metric	English	Comments
CTE, linear	50.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	27.8 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	
	@Temperature 23.0 - 100 $^\circ\text{C}$	@Temperature 73.4 - 212 $^\circ\text{F}$	
Thermal Conductivity	0.770 W/m-K	5.34 BTU-in/hr-ft ² - $^\circ\text{F}$	
Melting Point	327 $^\circ\text{C}$	621 $^\circ\text{F}$	DSC, 10 $^\circ\text{C}/\text{min}$.; ISO 11357-1/-3
Maximum Service Temperature, Air	260 $^\circ\text{C}$	500 $^\circ\text{F}$	Continuous
Deflection Temperature at 1.8 MPa (264 psi)	130 $^\circ\text{C}$	266 $^\circ\text{F}$	ISO 75-1/-2
Flammability, UL94	V-0	V-0	
Oxygen Index	$\geq 95\%$	$\geq 95\%$	ISO 4589-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.0\text{e}+13$ ohm-cm	$\geq 1.0\text{e}+13$ ohm-cm	IEC 60093
Surface Resistivity per Square	$\geq 1.0\text{e}+13$ ohm	$\geq 1.0\text{e}+13$ ohm	IEC 60093
Dielectric Strength	11.0 kV/mm	279 kV/in	

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)	Acceptable	Acceptable	
Acids, Weak	Acceptable	Acceptable	
Alcohols	Acceptable	Acceptable	

Chemical Resistance Properties Alkalies, Strong (pH 11-14)	Metric Unacceptable	English Unacceptable	Comments
Alkalies, Weak	Acceptable	Acceptable	
Chlorinated Solvents	Acceptable	Acceptable	
Continuous Sunlight	Acceptable	Acceptable	
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