

Quadrant EPP Ketron® GF30 PEEK + glassfibres, extruded (ISO Data)

Category : Polymer , Thermoplastic , Polyketone , Polyetheretherketone (PEEK) , Polyetheretherketone, PEEK, Glass Fiber Filled

Material Notes:

This 30 % glass fibre reinforced grade offers a higher stiffness and creep resistance than Ketron PEEK-1000 and has a much better dimensional stability. This grade is very appropriate for structural applications carrying high static loads for long periods of time at elevated temperatures. The suitability of Ketron PEEK-GF30 for sliding parts, however, is to be carefully examined since the glass fibres tend to abrade the mating surface. Very high maximum allowable service temperature in air (250 °C continuously, up to 310 °C for short periods of time) High mechanical strength, stiffness and creep resistance, also at elevated temperatures Excellent chemical and hydrolysis resistance Excellent wear & frictional behaviour Very good dimensional stability Excellent resistance to high energy radiation (gamma- and X-rays) Inherent low flammability and very low levels of smoke evolution during combustion

Order this product through the following link:

http://www.lookpolymers.com/polymer_Quadrant-EPP-Ketron-GF30-PEEK-glassfibres-extruded-ISO-Data.php

Physical Properties	Metric	English	Comments
Density	1.51 g/cc	0.0546 lb/in³	ISO 1183-1
Moisture Absorption at Equilibrium	0.16 %	0.16 %	50% RH
Water Absorption at Saturation	0.35 %	0.35 %	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	100	100	ISO 2039-2
Hardness, Shore D	87	87	
Ball Indentation Hardness	250 MPa	36300 psi	ISO 2039-1
Tensile Strength	80.0 MPa	11600 psi	at Yield; ISO 527-1/-2
Elongation at Break	4.5 %	4.5 %	ISO 527-1/-2
Elongation at Yield	3.5 %	3.5 %	ISO 527-1/-2
Tensile Modulus	7.00 GPa	1020 ksi	ISO 527-1/-2
Flexural Strength	155 MPa	22500 psi	
Compressive Strength	54.0 MPa	7830 psi	ISO 604
	@Strain 1 %	@Strain 1 %	
	103 MPa	14900 psi	ISO 604
	@Strain 2 %	@Strain 2 %	
	155 MPa	22500 psi	ISO 604
	@Strain 5 %	@Strain 5 %	

Mechanical Properties	Metric	English	Comments
K Factor (ISO)	1.0 µin/km	1.0 µin/km	
Charpy Impact Unnotched	2.50 J/cm ²	11.9 ft-lb/in ²	ISO 179-1/1eU
Charpy Impact, Notched	0.300 J/cm ²	1.43 ft-lb/in ²	ISO 179-1/1eA
Coefficient of Friction, Dynamic	0.30 - 0.45	0.30 - 0.45	

Thermal Properties	Metric	English	Comments
CTE, linear	30.0 µm/m-°C @Temperature 23.0 - 100 °C	16.7 µin/in-°F @Temperature 73.4 - 212 °F	
Thermal Conductivity	0.430 W/m-K	2.98 BTU-in/hr-ft ² -°F	
Melting Point	340 °C	644 °F	DSC, 10°C/min.; ISO 11357-1/-3
Maximum Service Temperature, Air	250 °C	482 °F	Continuous
Deflection Temperature at 1.8 MPa (264 psi)	230 °C	446 °F	ISO 75-1/-2
Flammability, UL94	V-0	V-0	
Oxygen Index	40 %	40 %	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	3.2 @Frequency >=100000 Hz	3.2 @Frequency >=100000 Hz	IEC 60250
Dielectric Strength	24.0 kV/mm	610 kV/in	
Dissipation Factor	0.0010 @Frequency 100000 Hz	0.0010 @Frequency 100000 Hz	IEC 60250
Comparative Tracking Index	175 V	175 V	IEC 60112

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

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