

Daikin POLYFLON MG-1431 PTFE 15% Glass Fiber and 5% MoS2 Filled Molding Powder

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE , Polytetrafluoroethylene (PTFE), Glass Filled, Molded

Material Notes:

15% glass fiber and 5% MoS2 filled. High wear resistance, good electrical properties, low friction, high creep resistance. Applications: Mechanical and electrical service (e.g. split-curved bearings, valve seats) Information provided by Daikin Industries.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Daikin-POLYFLON-MG-1431-PTFE-15-Glass-Fiber-and-5-MoS2-Filled-Molding-Powder.php

Physical Properties	Metric	English	Comments
Specific Gravity	2.13 - 2.22 g/cc	2.13 - 2.22 g/cc	ASTM D792
Water Absorption	0.00 %	0.00 %	ASTM D570
	@Thickness 8.50 mm, Time 86400 sec	@Thickness 0.335 in, Time 24.0 hour	
Viscosity	1.00e+13 - 1.00e+15 cP	1.00e+13 - 1.00e+15 cP	Melt viscosity
	@Temperature 340 - 380 °C	@Temperature 644 - 716 °F	
Linear Mold Shrinkage	0.020 - 0.050 cm/cm	0.020 - 0.050 in/in	
Deformation	5.0 %	5.0 %	6.7 MPa load, at 100°C, 24 hrs; ASTM D621
	7.0 %	7.0 %	13.7 MPa load, at 25°C, 24 hrs; ASTM D621

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	50 - 65	50 - 65	
Tensile Strength at Break	20.0 - 45.0 MPa	2900 - 6530 psi	ASTM D638
Elongation at Break	200 - 450 %	200 - 450 %	ASTM D638
Tensile Modulus	0.392 GPa	56.9 ksi	ASTM D638
Flexural Modulus	0.490 - 0.588 GPa	71.1 - 85.3 ksi	ASTM D790
Compressive Strength	5.00 - 6.00 MPa	725 - 870 psi	1% deformation; ASTM D695
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Izod Impact, Unnotched	1.60 J/cm	3.00 ft-lb/in	ASTM D256
Coefficient of Friction	0.15 - 0.30	0.15 - 0.30	Non-lubricating
Coefficient of Friction, Static	0.020	0.020	Coated-steel surface

Thermal Properties	Metric	English	Comments
CTE, linear	100 $\mu\text{m/m-}^{\circ}\text{C}$	55.6 $\mu\text{in/in-}^{\circ}\text{F}$	ASTM D696
	@Temperature 23.0 - 60.0 $^{\circ}\text{C}$	@Temperature 73.4 - 140 $^{\circ}\text{F}$	
Thermal Conductivity	0.250 W/m-K	1.74 BTU-in/hr-ft ² - $^{\circ}\text{F}$	ASTM C177
Melting Point	327 $^{\circ}\text{C}$	621 $^{\circ}\text{F}$	
Maximum Service Temperature, Air	260 $^{\circ}\text{C}$	500 $^{\circ}\text{F}$	Continuous use
Flammability, UL94	V-0	V-0	
Oxygen Index	$\geq 95\%$	$\geq 95\%$	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\leq 1.00\text{e}+18$ ohm-cm	$\leq 1.00\text{e}+18$ ohm-cm	ASTM D257
Dielectric Constant	2.1	2.1	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	2.1	2.1	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	19.0 kV/mm	483 kV/in	Short time; ASTM D149
	@Thickness 3.20 mm	@Thickness 0.126 in	
Dissipation Factor	≤ 0.000010	≤ 0.000010	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.000020	0.000020	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Descriptive Properties	Value	Comments
Chemical Resistance	Excellent	
Contact Angle	110	Angle to level
Weatherability	Excellent	

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