POTICON RF25X2

Polyphenylene Sulfide

Otsuka Chemical Co., Ltd.

Message:

The Poticon series features a potassium titanate micro-filler compounded in thermoplastic resins to provide outstanding micro-reinforcement and dimensional stability. The excellent surface smoothness of these compounds limits friction toward opposing materials, reducing wear and allowing for greaseless applications. Moreover, as Poticon diminishes damage toward the mold and metal die and offers excellent recyclability, it also decreases processing costs.
Advantages
Microscopic reinforcement
Superior friction sliding and wear reduction
Excellent dimensional accuracy and surface smoothness
Highly recyclable
Applications
Automotive Parts (gears, bearings)
LED Reflectors
Watch Parts (gears, ground plane)
Camera (image stabilization parts)
Sliding Parts (gears, wheel bearing)
Camera Module Parts
Motor Parts (cog-wheels, bearings)
RF25X2 Property: Slide, Conductive property

General Information			
UL YellowCard	E96773-102017739		
Features	High Dimensional Stability Conductivity Low friction coefficient Recyclable materials		
Uses	LEDs Gear Application in Automobile Field Camera application Bearing		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.56	g/cm³	ASTM D792
Molding Shrinkage			
Flow	0.80	%	
Transverse flow	1.4	%	
Water Absorption (Equilibrium)	0.020	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	48		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**

Tensile Strength	48.0	MPa	ASTM D638
Tensile Elongation (Break)	1.4	%	ASTM D638
Flexural Modulus	5600	MPa	ASTM D790
Flexural Strength	60.0	MPa	ASTM D790
Coefficient of Friction (vs. Steel - Dynamic)	0.18		
Abrasion Loss			
-- [1]	3.90	10^-3 mm³/N·km	
of counterpart [2]	0.00	10^-3 mm³/N·km	
Heat Distortion	217	°C	ASTM D648
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	34	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow	4.9E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+4	ohms·cm	ASTM D257
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-2		UL 94
Injection	**Nominal Value**	**Unit**	
Processing (Melt) Temp	290 - 320	°C	
Mold Temperature	120 - 150	°C	
Injection Pressure	70.0 - 100	MPa	
NOTE			
1.	Surface pressure: 1MPa		
2.	Slipping velocity: 0.3m/sec		

Recommended distributors for this material

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