POTICON AM2

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)
AM2 Property: High strength, High rigidity, Slide, Conductive property

General Information			
UL YellowCard	E96773-253492		
Features	High Dimensional Stability Conductivity Low friction coefficient Rigidity, high High strength Recyclable materials		
Uses	LEDs Gear Application in Automobile Field Camera application Bearing		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.68	g/cm³	ASTM D792
Molding Shrinkage			
Flow	0.20	%	
Transverse flow	0.70	%	
Water Absorption (Equilibrium)	0.080	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**

Rockwell Hardness (M-Scale)	86		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	157	MPa	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	14700	MPa	ASTM D790
Flexural Strength	201	MPa	ASTM D790
Coefficient of Friction (vs. Steel - Dynamic)	0.15		
Abrasion Loss			
-- [1]	7.10	10^-3 mm³/N·km	
of counterpart [2]	0.100	10^-3 mm³/N·km	
Heat Distortion	235	°C	ASTM D648
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	29	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow	1.1E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+5	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		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

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China