POTICON AT342

Acetal (POM) Copolymer

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)
AT342 Property: High strength, High rigidity, Slide

General Information			
UL YellowCard	E96773-253440		
Features	High Dimensional Stability 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	1.53	g/cm³	ASTM D792
Molding Shrinkage			
Flow	1.2	%	
Transverse flow	1.9	%	
Water Absorption (Equilibrium)	0.20	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	74		ASTM D785

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	82.0	MPa	ASTM D638
Tensile Elongation (Break)	3.3	%	ASTM D638
Flexural Modulus	6100	MPa	ASTM D790
Flexural Strength	121	MPa	ASTM D790
Coefficient of Friction (vs. Steel - Dynamic)	0.20		
Abrasion Loss			
-- [1]	1.30	10^-3 mm³/N·km	
of counterpart [2]	0.00	10^-3 mm³/N·km	
Heat Distortion	147	°C	ASTM D648
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	39	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow	3.8E-5	cm/cm/°C	ASTM D696
Flammability	Nominal Value		Test Method
Flame Rating	HB		UL 94
Injection	Nominal Value	Unit	
Processing (Melt) Temp	185 - 215	°C	
Mold Temperature	60 - 100	°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