POTICON OB30

Polybutylene Terephthalate

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)
OB30 Property: General-purpose

General Information			
UL YellowCard	E96773-253455		
Features	High Dimensional Stability Low friction coefficient Recyclable materials General		
Uses	LEDs Gear Application in Automobile Field General Camera application Bearing		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.61	g/cm³	ASTM D792
Molding Shrinkage			
Flow	0.60	%	
Transverse flow	1.2	%	
Water Absorption (Equilibrium)	0.070	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	89		ASTM D785

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	115	MPa	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	8900	MPa	ASTM D790
Flexural Strength	174	MPa	ASTM D790
Coefficient of Friction (vs. Steel - Dynamic)	0.13		
Abrasion Loss			
-- [1]	22.4	10^-3 mm³/N·km	
of counterpart [2]	0.00	10^-3 mm³/N·km	
Heat Distortion	190	°C	ASTM D648
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	41	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow	2.8E-5	cm/cm/°C	ASTM D696
Flammability	**Nominal Value**		**Test Method**
Flame Rating	HB		UL 94
Injection	**Nominal Value**	**Unit**	
Processing (Melt) Temp	240 - 270	°C	
Mold Temperature	60 - 100	°C	
Injection Pressure	50.0 - 100	MPa	
NOTE			
1.	Surface pressure: 1MPa		
2.	Slipping velocity: 0.3m/sec		

Recommended distributors for this material

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