

# POTICON RTG28B

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)
- RTG28B Property: High strength, Slide

General Information			
Features	High Dimensional Stability		
	Low friction coefficient		
	High strength		
	Recyclable materials		
Uses	LEDs		
	Gear		
	Application in Automobile Field		
	Camera application		
Processing Method	Bearing		
	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.84	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage			
Flow	0.20	%	ASTM D570
Transverse flow	0.70	%	
Water Absorption (Equilibrium)	0.010	%	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	89		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	140	MPa	ASTM D638

Tensile Elongation (Break)	2.6	%	ASTM D638
Flexural Modulus	14500	MPa	ASTM D790
Flexural Strength	203	MPa	ASTM D790
Coefficient of Friction (vs. Steel - Dynamic)	0.44		
Abrasion Loss			
-- <sup>1</sup>	8.30	10 <sup>-3</sup> mm <sup>3</sup> /N·km	
of counterpart <sup>2</sup>	0.700	10 <sup>-3</sup> mm <sup>3</sup> /N·km	
Heat Distortion	268	°C	ASTM D648
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	52	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow	1.7E-5	cm/cm/°C	ASTM D696
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		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### 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



WECHAT