# POTICON BT262

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)
BT262 Property: High strength, High rigidity, Slide

| General Information | | | |
|---|---|---|---|
| UL YellowCard | E96773-253465 | | |
| Features | High Dimensional Stability<br>Low friction coefficient<br>Rigidity, high<br>High strength<br>Recyclable materials | | |
| Uses | LEDs<br>Gear<br>Application in Automobile Field<br>Camera application<br>Bearing | | |
| Processing Method | Injection molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 1.58 | g/cm³ | ASTM D792 |
| Molding Shrinkage | | | |
| Flow | 0.90 | % | |
| Transverse flow | 1.8 | % | |
| Water Absorption (Equilibrium) | 0.070 | % | ASTM D570 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (M-Scale) | 83 | | ASTM D785 |

| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Strength | 102 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 3.2 | % | ASTM D638 |
| Flexural Modulus | 8300 | MPa | ASTM D790 |
| Flexural Strength | 158 | MPa | ASTM D790 |
| Coefficient of Friction (vs. Steel - Dynamic) | 0.19 | | |
| Abrasion Loss | | | |
| -- [1] | 1.20 | 10^-3 mm³/N·km | |
| of counterpart [2] | 0.00 | 10^-3 mm³/N·km | |
| Heat Distortion | 185 | °C | ASTM D648 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact | 49 | J/m | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| CLTE - Flow | 3.2E-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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