

TECHNICAL DATA

# P716-PLA

P r o d u c t   D e m o n s t r a t i o n



## ■ Material Overview

PLA granule is a new bio-based and biodegradable material, which is made of starch from plant resources (such as corn). It has good biodegradability and is recognized as an environmentally friendly material. Suitable for indoor decorative furniture and other scenes.

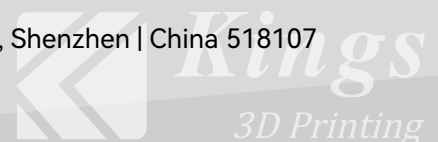
The good discharging state is: no bubbles, glossy , Particle diameter: about 3 mm.  
Applicable models: FGF-800,FGF-1800,FGF-AM-2420,FGF-HM-2435

**Shenzhen Kings 3D Printing Technology Co., Ltd.**

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## Product Information

**Manufacturer:**  
Guangdong Kings intelligent manufacturing co., ltd.

**Other certificates:**  
REACH

**Material identification:**  
>PLA<

**Color:**  
inherent/true qualities

**Material shape:**  
granulate

**Processing method:**  
3D printing

**Flame retardant rating:**  
HB

**Up to specification:**  
● UL

**Material characteristics:**  
● High gloss ● High rigidity ● Medium impact ● General grade

**Material use:**  
● General ● Sculpture ● Toys ● Decorations ● Hand-made

## Technical Datasheet

| Physical Property     | Testing Standards | Data | Unit    |
|-----------------------|-------------------|------|---------|
| Melt index 220°C 10kg | ASTM D1238        | 197  | g/10min |
| Melt index 220°C 10kg | ISO 1133          | 197  | g/10min |
| Melt index 200°C 5kg  | ASTM D1238        | 65   | g/10min |
| Melt index 200°C 5kg  | ISO 1133          | 65   | g/10min |

| Hardness                       | Testing Standards | Data | Unit |
|--------------------------------|-------------------|------|------|
| Rockwell hardness r scale 23°C | ASTM D785         | 84   | /    |
| Rockwell hardness r scale 23°C | ISO 2039          | 84   | /    |

| Mechanical Character   | Testing Standards | Data | Unit |
|------------------------|-------------------|------|------|
| Tensile Strength       | ASTM D638         | 50.5 | MPa  |
| Young's Modulus        | ASTM D638         | 4780 | MPa  |
| Elongation at at break | ASTM D638         | 9.6  | %    |
| Flexural Strength      | ASTM D790         | 61   | MPa  |
| Flexural Modulus       | ASTM D790         | 2234 | MPa  |
| IZOD Impact Notched    | ASTM D256         | 48   | J/m  |

| Hot Property          | Testing Standards | Data    | Unit |
|-----------------------|-------------------|---------|------|
| Heat Deflection(HDT)  | ASTM D648         | 54.5    | °C   |
| Glass Transition(Tg)  | ASTM D7426        | 58.8    | °C   |
| Melting Point         | ASTM D7426        | 162.6   | °C   |
| Decomposition Temp@5% | ASTM E2402        | ≥374    | °C   |
| Vicat Softening Tem   | ASTM D1525        | 54      | °C   |
| Mold Shrinkag         | ASTM D955         | 0.1-0.3 | %    |

| Others             | Testing Standards | Data     | Unit    |
|--------------------|-------------------|----------|---------|
| Melt Flow Rate     | ASTM D1238        | 10       | g/10min |
| Density            | ASTM D792         | 1.3      | g/cm³   |
| Volume Resistivity | ASTM D257         | 2.90E+15 | ohm-cm  |
| Dielectric Constan | ASTM D150         | 1.51     | /       |
| Flammability       | UL94              | HB       | Class   |