

# Product technical instructions

Product brand: Piocreat\_TPU3D\_0009 Material No.: D3301040001

Revision date: 2022-3-29 Version: V2.0

## **Product Description**

Piocreat\_TPU is a polyester TPU 3D printing particle. The appearance of the product is transparent, translucent or colored particles. The product does not contain plasticizers and has excellent mechanical properties, elasticity and wear resistance.

# **Application**

3D printing consumables.

## Main performance table

Project	Test standards	Unit	Test value
Hardness	ASTM D 2240	Shore A	95
Density	ASTM D 792	g/cm³	1.21
100% elongation strength	ASTM D 412	MPa	14
300% elongation strength	ASTM D 412	MPa	23
Tensile Strength	ASTM D 412	MPa	32
Elongation at break	ASTM D 412	%	600
Moisture	ASTM D 6890	%	0.5
Glass transition temperature	ASTM D 3418	°C	-32

Note: The above values are typical, please contact your sales representative for batch-specific details.

# **Recommended processing conditions**

### Print directly

	Heating zone 1	Heating zone 2	Heating zone 3	Heating zone 4	Nozzle
°C	180	185	190	195	195

Bottom plate temperature: room temperature ~50°C



#### Extrusion processing

	Feeding area	Heating zone 1	Heating zone 2	Heating zone 3	Heating zone 4	Flange	Mouth mold
°C	185	190	195	200	205	210	205

Note: The above processing parameters are for customer reference only. Customers need to adjust the corresponding processing parameters according to specific equipment to obtain the best process conditions and product quality.

## **Drying precautions**

TPU 3D printing particles should be stored dry and airtight when not in use, ensuring that the moisture content is less than 0.5% when used for printing. Before use again after opening the package, they need to be dried in an oven at 80°C~100°C for 4~6 hours before use.

#### **Version Information**

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The indicators and data given in this information are based on our existing technical knowledge and practical experience and are for reference only. Specific guarantee indicators shall be subject to the provisions of the quality guarantee or supply contract. Users are responsible for testing the products purchased from our company to verify whether they are suitable for their intended processes and purposes and to achieve the intended purpose. The further application and processing of our products is beyond our control and therefore our liability for the products supplied is limited to that part delivered by us and used by you. We are not responsible for any indirect losses caused by using our company's products as raw materials for production. The technical support and customer service center of our company's marketing department is willing to provide you with product consultation and application technical services. Welcome to contact us by email or phone.

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