

# EP081015NC001-TDS

## COCOON PETG-Mineral

COCOON PETG-Mineral is a high-performance PETG compound designed for aesthetic excellence and functional durability. It features enhanced thermal stability and UV resistance that significantly outperforms standard PLA. The proprietary silk-effect modification provides a premium satin finish in a variety of vibrant colors. Applications include artistic works, interior decorations, and functional prototyping.

### Part 1 Injection-Molded Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Physical Properties				
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1.27
Melt Volume Rate	230°C, 2.16kg	ISO 1133	g/10min	12
Mechanical Properties				
Tensile Strength	50mm/min	ISO 527-1	MPa	45
Flexural Strength	2mm/min	ISO 178	MPa	42
Flexural Modulus	2mm/min	ISO 178	MPa	1900
Impact Strength, Notched	1J	ISO 179-1	kJ/m <sup>2</sup>	3
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	65-70

*Note: The typical physical properties are not intended for use as sales specifications.*

## Part 2 Printed Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Mechanical Properties				
Tensile Strength(X-Y)	50mm/min	ISO 527-1	MPa	45
Tensile Modulus(X-Y)	50mm/min	ISO 527-1	MPa	1800
Tensile Strength(Z)	50mm/min	ISO 178	MPa	18.5
Tensile Modulus(Z)	50mm/min	ISO 178	MPa	1300
Flexural Strength	2mm/min	ISO 178	MPa	70
Flexural Modulus	2mm/min	ISO 178	MPa	1800
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m <sup>2</sup>	3
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	65-70

*Note: All specimens are printed under the following conditions: nozzle temperature = 260°C, printing speed = 105 mm/s, build plate temperature=75°C infill = 100%, nozzle diameter = 0.4mm.*



Printing Path Direction of Specimen (Z)



Printing Path Direction of Specimen (X-Y)

## Part 3 Printing Guidelines

Parameters	Settings
Nozzle Temperature	250-270°C
Build Plate Temp.	70-75°C
Build Plate Material	Glass、PEI、Steel Spring Build Plate
Bottom Layer Printing Temp.	250°C
Enclosed-chamber Printing	Support open printing
Print Speed	60-150mm/s
Drying recommendations	60 °C in a hot air dryer for 4hours

### Disclaimer:

The values provided in this data sheet are for reference and comparison purposes only. They should not be used for design specifications or quality control. Actual values may vary depending on printing conditions. The ultimate performance of printed parts depends not only on the material but also on the part design, environmental conditions, and printing conditions. The product specifications are subject to change without notice.

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