CR-PLA Filament Technical Data Sheet

Version 2.0

1. Product introduction

CR-PLAfilaments are 3D printing filaments based on PLA. Good printing performance, bright model surface ,rich color ,excellent toughness, and high dimensional accuracy.

2. Physical Performance Parameters

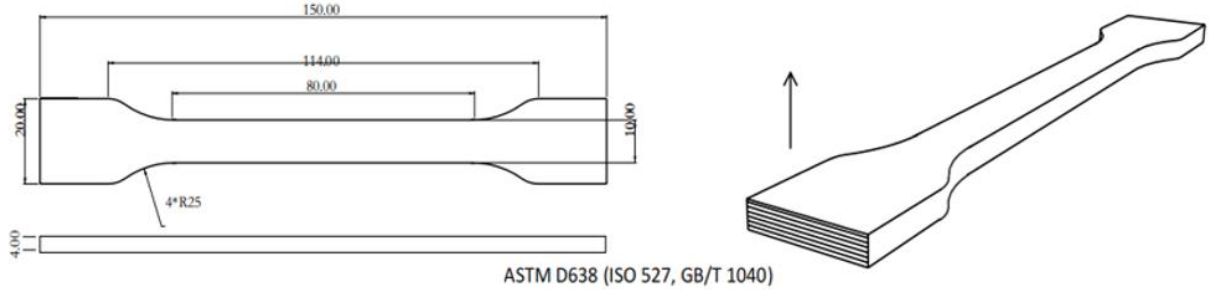
Items	Testing Criteria	Parameters
Density	ASTM D792 (ISO 1183, GB/T 1033)	1.25 ±0.1 (g/cm3 at 21.5˚C)
Glass transition temperature	DSC, 10 °C/min	61 (°C)
Vicat Softening temperature	ASTM D1525 (ISO 306 GB/T 1633)	62.7 ±0.4(˚C)
Melt index	190°C, 2.16 kg	5-10 (g/10 min)

3. Mechanical Performance Parameters

Items	Testing Criteria	Parameters
Tensile strength (X-Y)	ISO 527, GB/T 1040	48-51 (MPa)
Tensile strength（Z）	ISO 527, GB/T 1040	8.63(MPa)
Elongation at break（X-Y）	ISO 527, GB/T 1040	8.5-9(%)
Elongation at break（Z）	ISO 527, GB/T 1040	3.5 (%)
Bending strength（X-Y）	ISO 178, GB/T 9341	76-86(MPa)
Charpy impact strength（X-Y）	ISO 179, GB/T 1043	10-10.5（kJ/m^2)

Printing parameters and styles of printing conditions:

Print Conditions	Parameters
Nozzle Temperature	200℃
Hot Bed Temperature	50℃
Printing Speed	60mm/s
Infill	100%



ASTM D638 (ISO 527, GB/T 1040)

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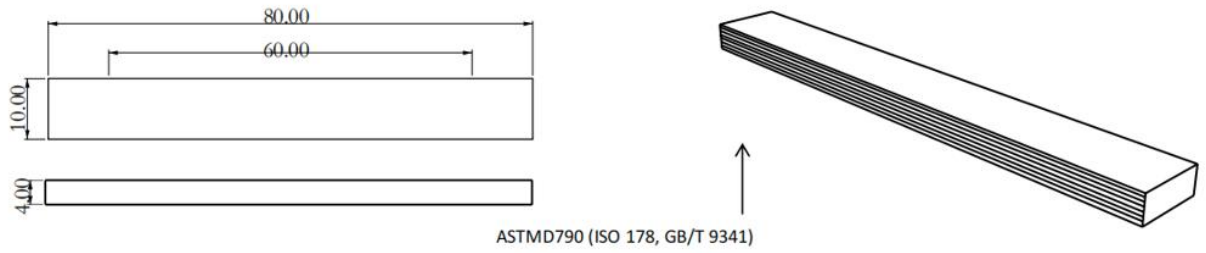

ASTMD790 (ISO 178, GB/T 9341)

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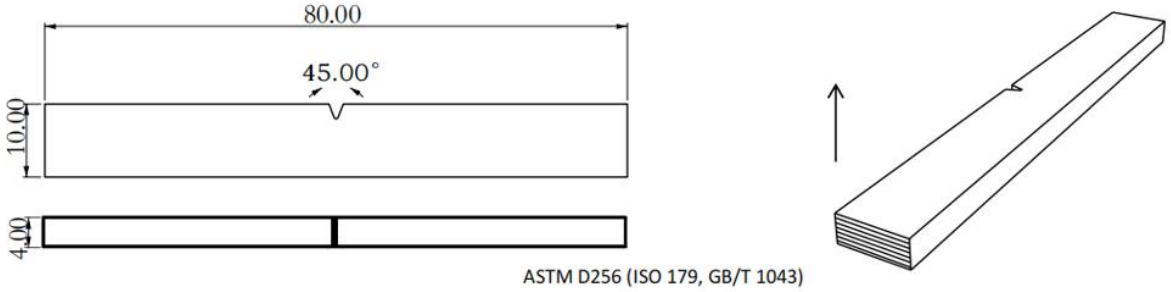

ASTM D256 (ISO 179, GB/T 1043)

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4. Recommended printing conditions

Print Temperature	Hotbed Temperature	Ambient Temperature	Print Speed	Pumping Distance
190-230℃	Non-heating/60℃	0-50℃	40-100mm/s	3-8mm

5. Compatible Models

CR-PLA wildly used in FDM 3D printers on the market.

6. Storage Condition

Please place this product in a dry and ventilated environment, not in an environment of high temperature, sunny or humid conditions. If it is not used up within a short time after opening, it is recommended to use it with a dry box when using it again.

7. Disclaimer

The values given in this data sheet are for reference and comparison only. Actual values may vary with printing conditions, and the end-use performance of printed models depends on model design, environmental conditions, printing conditions, etc.