

Eryone Metallic Filament Datasheet

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IDENTIFICATION

Trade Name	Eryone Metallic PLA
Diameter	1.75±0.03mm
Usage	FDM/FFF 3D Printing

TYPICAL MATERIAL PROPERTIES

Physical Properties	Unit	Testing Standard	Iron	Wolfram	Stainless Steel	Copper
Specific Gravity	g/cm ³	ASTMD-792	2.16	3.24	2.12	2.31
MFR (170℃,2160g)	g/10min	ASTMD-1238	9.3	7.3	8.6	8.7
<u>Melting Point</u>	℃	DSC	160-170	160-170	160-170	160-170
Vicat Softening Point	A/120℃	ASTMD-648	60	60	60	60
Tensile Yield Strength	MPa	ASTMD-638	18	25	20	23
Elongation at Break	%	ASTMD-638	305	280	295	295
Flexural Modulus	Kj/m ²	ASTMD-256	NO	NO	NO	NO
Notch Impact Strength	%	ASTMD-955	0.3-0.5	0.3-0.5	0.3-0.5	0.3-0.5
Water Absorption	%	ASTMD-570	<1	<1	<1	<1

*The results presented in this datasheet are just for your information and comparison

PRINT BASIC SETTING

Relevant Parameters of Recommended Machine Types		
Type	Extruder Type/Heated Bed Type	Recommend Parameter

Creality Ender3	Bowden/Flexible Bed Sticker	Printing Temperature: 195-215°C Heated Bed Temperature: 60-65°C Printing Speed: 20-60mm/s Retracting Length: 4mm Retracting Speed: 110mm/s
Creality CR-10	Bowden/Glass Bed	Printing Temperature: 200-220°C Heated Bed Temperature: 65-70°C Printing Speed: 20-60mm/s Retracting Length: 4mm Retracting Speed: 110mm/s
Anycubic mega-s	Bowden/ Microporous Coating Glass Bed	Printing Temperature: 200-220°C Heated Bed Temperature: 60-70°C Printing Speed: 20-65mm/s Retracting Length: 2-4mm Retracting Speed: 70-100mm/s
Prusa i3	Direct Drive Extruder/PEI Bed Sticker	Printing Temperature: 195-225°C Heated Bed Temperature: 55-70°C Printing Speed: 20-70mm/s Retracting Length: 0.8mm Retracting Speed: 30-40mm/s
Thinker S	Bowden/PEI Bed Sticker	Printing Temperature: 195-220°C Heated Bed Temperature: 60-65°C Printing Speed: 20-60mm/s Retracting Length: 4mm Retracting Speed: 110mm/s
Thinker SE	Bowden/Glass Bed	Printing Temperature: 195-220°C Heated Bed Temperature: 65-70°C Printing Speed: 20-60mm/s Retracting Length: 4mm Retracting Speed: 110mm/s
ER-20	Bowden/Ink- Coated Glass Bed	Printing Temperature: 190-225°C Heated Bed Temperature: 60-70°C Printing Speed: 20-70mm/s Retracting Length: 3mm Retracting Speed: 110mm/s