

Print parameter list

eSUN®

Leading brand of 3D printing material

Filament Type	Print Temp (°C)	Bed Temp (°C)	Density (g/cm³)	Heat Distortion Temp (°C, 0.45MPa)	Melt Flow Index (g/10min)	Tensile Strength (MPa)	Elongation at Break (%)	Flexural Strength (MPa)	Flexural Modulus (MPa)	IZOD Impact Strength (kJ/m²)
PLA	190-220	No Heat(60-80)	1.25	56	5(190°C/2.16kg)	65	8	97	3600	4
PLA+	190-220	No Heat(60-80)	1.25	52	4(190°C/2.16kg)	65	12	75	2102	8.5
ABS	220-260	90-110	1.04	78	12(220°C/10kg)	43	22	66	2348	19
ABS+	220-260	90-110	1.06	73	15(220°C/10kg)	40	30	68	2443	42
ABS Odorless	220-260	100-110	/	/	/	40.4	34	61	2377	12.2
eABS MAX	220-260	90-110	1.05	85	60(220°C/10kg)	45	30	58	2400	48
eASA	220-260	90-110	1.00	54	10-15(220°C/10kg)	50	30	35	4300	19
HIPS	220-260	90-110	1.05	80	3(200°C/5kg)	27	55	39	2280	11
PETG	230-250	No Heat(60-80)	1.23	64	20(250°C/2.16kg)	49	225	68	1800	7.6
PVA	190-210	No Heat(60-80)	1.25	/	/	22	360	/	/	/
ePVA+	190-210	No Heat(60-80)	1.14	/	/	26	190	/	/	/
eSmooth	190-220	No Heat(60-80)	/	63.5	4-6(190°C/2.16kg)	46	273	71	2799	4
Wood	190-220	No Heat(60-80)	0.7	45	17(190°C/2.16kg)	/	/	/	/	/
Color Change	190-220	No Heat(60-80)	1.24	58	10(190°C/2.16kg)	65	5	97	3600	4
eClean	160-300	/	0.95	45	/	23	580	/	/	29
Bronze	190-220	No Heat(60-80)	1.27	50	62(190°C/2.16kg)	66	16	106	4442	4
eCopper	190-220	No Heat(60-80)	2.46	52	20(190°C/2.16kg)	40	4	64	4954	4
eAl-fill	190-220	No Heat(60-80)	1.48	52	8(190°C/2.16kg)	45	5	74	4885	4
eSteel	190-220	No Heat(60-80)	2.46	52	14(190°C/2.16kg)	45	5	63	4452	5
ePA (Nylon)	230-260	80-90	1.12	50	5(230°C/2.16kg)	57	196	57	1495	15
ePA-CF	230-260	80-90	1.24	120	6(250°C/5kg)	85	26	122	5160	15.5
ePA6-CF	240-280	60	1.4	240	/	170	2	/	15	/
ePA-GF	230-260	80-90	1.35	120	7(250°C/5kg)	101	17	160	4300	8
ePC	230-260	80-110	1.12	80	5(230°C/2.16kg)	57	196	57	1495	15
eFlex (TPU)	210-240	No Heat	1.12	/	/	52	500	/	/	/
eLastic (TPE)	210-240	No Heat	1.14	/	/	32	420	/	/	/
eTPU-95A	210-240	No Heat	1.43	/	8.4g/10min(190°C/2.16kg)	/	780	/	/	/
eMate (PCL)	70-100	≤40	1.16	45	0.5(70°C/2.16kg)	18	>800	13	345	Don't break
ePeek	380-450	90-150	1.30	152	10(380°C/5kg)	100	40	170	3500	7
eSilk-PLA	190-220	No Heat(60-80)	1.43	67	2.5(190°C/2.16kg)	58	300	75	4000	4
eTwinkling	190-220	No Heat(60-80)	1.41	67	2.5(190°C/2.16kg)	58	/	70	2100	4
eMarble	190-220	No Heat(60-80)	1.24	67	/	60	6.0	/	/	/
LCD Resin Type	Wavelength (nm)	Density (g/cm³)	Viscosity (25°C, MPa·s)	Hardness (Shore D)	Tensile Strength (MPa)	Elongation at Break(%)	Flexural Strength(MPa)	Flexural Modulus (MPa)	IZOD Impact Strength (J/m)	
eResin-PLA	395-405	1.07-1.13	200-300	75-80	35-50	20-50	40-60	600-800	15-32	
Standard Resin	395-405	1.08-1.13	150-250	80-82	46-67	28-35	46-72	1000-1400	18-40	
Hard-Tough Resin	395-405	1.10-1.15	200-300	81	55-60	30-50	70-80	1300-1400	67-100	
Rigid Resin	395-405	1.10-1.15	200-300	83	60-70	25-35	80-85	1400-1500	15-42	
Castable Resin for Jewelry	395-405	1.05-1.12	100-150	60	42-62	11-20	49-58	1860-2640	44-49	
Castable Resin for Dental	395-405	1.05-1.12	100-150	80	42-62	11-20	49-58	1180-2520	44-49	
DLP Resin Type	Wavelength (nm)	Density (g/cm³)	Viscosity (25°C, MPa·s)	Hardness (Shore D)	Tensile Strength (MPa)	Elongation at Break(%)	Flexural Strength(MPa)	Flexural Modulus (MPa)	IZOD Impact Strength (J/m)	
eResin-PLA	395-405	1.07-1.13	200-300	70-75	30-40	20-40	/	/	15-32	
Non-castable Resin	395-405	1.05-1.13	100-150	88	36-52	11-20	59-70	1882-2385	44-49	
Castable Resin for Jewelry	395-405	1.05-1.13	100-150	60	42-62	11-20	49-58	1862-2645	44-49	
Castable Resin for Dental	395-405	1.05-1.13	100-150	81	42-62	11-20	49-58	1192-2525	44-49	