Material / Features	Degradable or Not	Softening Point/℃	Melting point/℃	Shrinkage Easy or not	Printing temperature/℃	Bed temperature/℃	Printing Speed/mm/s	Features
PLA	Y	55	180	N	190-220	50-60	40-100	It is easy to print and has excellent dimensional stability, making it the foundational filament ideal for beginners and display models
PLA++	Y	60	190	N	190-230	50-60	40-100	Building on its excellent features—including a wide printing temperature range, minimal stringing, and smooth surface finish for easy printing—this material now offers enhanced toughness and stability.
PETG	N	90	200	N	220-260	60-80	50-100	Slightly more prone to shrinkage than PLA, printed parts are more heat-resistant, durable, and ideal for functional components
ABS	N	100	220	Easy	230-280	90-120	50-100	This material exhibits slight shrinkage but offers excellent toughness. It requires high printing precision, including the use of a heated chamber. Printed parts are strong, heat-resistant, and suited for industrial-grade applications, making it more demanding in terms of equipment and user expertise.
PLA Silk	Y	50	180	N	200-230	50-60	50-100	Both the filament and the printed parts exhibit a silky sheen
TPU	N	80	180	N	200-230	50-60	20-40	PU 95A is a TPU hardness grade with no distinct melting point, low shrinkage, and excellent elasticity and wear resistance, making it the most commercially viable choice for broad-market sales.。
TPU Rainbow	N	80	180	N	190-230	50-60	20-40	95A flexible filament, on the softer side of the hardness scale, features vibrant colors arranged in 8-meter segments per shade, cycling through 5 colors. It is ideal for printing toys—yielding smooth, rounded edges, excellent impact resistance, and a pleasant tactile feel.
Nylon	N	160	220	N	250-290	90-120	50-100	It offers high strength, excellent heat resistance, good toughness, a smooth surface, and a low friction coefficient.
Flexible PLA(Soft)	Y	45	180	N	200-230	50-60	20-40	Flexible PLA is a low-shrinkage, semi-flexible material based on standard PLA. It has a melting point close to PLA, begins to soften around 50°C, is easy to print, but offers limited heat resistance and elasticity.
HIPS	N	85	200	Easy	220-250	90-105	30-60	HIPS is an engineering polymer with no distinct melting point, softening at around 100°C. While it exhibits noticeable shrinkage during printing, its core value lies in serving as a dissolvable support material for ABS.
ASA	N	100	210	Easy	230-260	75-90	30-50	Recommended for outdoor and weather-resistant parts, this material offers exceptional weatherability, making it the top choice for outdoor 3D printing applications.
PLA（Chameleon/Glitter Galaxy Glitter/Luminous Starry/Magic）	Y	52	180	N	200-230	50-60	40-100	Core Processing PLA is an appearance-focused variant of PLA, offering a high-gloss, sparkling surface finish, though it has moderate strength and heat resistance.
PLA Matte	Y	55	180	N	200-230	50-60	40-100	PLA Matte is an appearance-optimized PLA variant, ideal for display models rather than functional parts. It minimizes visible layer lines, offers excellent photogenic qualities and surface coverage, making it perfect for figurines, scale models, and prototypes.
PLA Color change by UV/Color change by Temp	Y	52	180	N	200-230	50-60	40-100	PLA Color change by UV/Color change by Temp is a special-effect modified PLA that exhibits negligible shrinkage during printing. Its primary value lies in visual transformation rather than structural performance.