

Standard Plastic Additive Materials (Not all materials are listed. Ask your account manager about availability)

Material	Description	Process	Production Equivalent	Color	Tensile Strength (Mpa)	Elongation at Break	Flex Modulus (Mpa)	Impact Strength (j/m)	Heat Deflection (66PSI)	Flame Rating	Bio-Compatible	Applications
	A summary of each material and is a quick way to find which material best fits your needs.	This is the actual 3D printing technology that is used with the given material.	Each material was developed to mimic an actual production plastic material. See which one matches your end use production material.	Each material has its own unique color. Some are offered in multiple colors or can be made into a color of your choosing.	The resistance of a material to breaking under tension. ASTM D638 for Rigid Material & ASTM 412 for Elastic.	Also known as fracture strain, it is the ratio between changed length and initial length after breakage. It is the capability of the material to resist change of shape without cracking. ASTM D638 for Rigid Material & ASTM 412 for Elastic.	Flexural Modulus or Bending Modulus is the ratio of stress to strain in flexural deformation, or the tendency for a material to bend. ASTM D790.	The capability of the material to withstand sudden applied load. This is a measurement of impact energy to fracture. ASTM D256.	The temperature at which a plastic material deforms under a specified load. ASTM D648.	The UL 94 safety standard for flammability. UL 94 HB is the lowest flame rating and UL 94 5VA is the highest rating.	Bio-compatible rating is if the material is harmful to living tissue. If the material is rated it will be a ranking for different levels of approval like skin contact or implantable.	A quick guide for the best usage of each material with how it is used and what it can be used for.
ABS-M30	Rigid & Tough	FDM	ABS	White, Black, Grey, Red, Blue	28-32	2-7%	1760-2060	128	96C / 204F	UL 94 HB	NA	Production, Fixtures, Testing, Fit & Function
PC	Rigid & Tough	FDM	PC	White	42-57	2.5-4.8%	1800-2006	28-73	138C / 280F	UL 94 HB	NA	Production, Fixtures, Testing, Fit & Function
PC-ISO	Rigid & Tough	FDM	PC	White	57	4%	2100	86	133C / 271F	UL 94 HB	Yes	Medical Device Production Parts, Testing, Fit & Function
Ultem 9085	Rigid & High Heat	FDM	Ultem	Tan or Black	42-69	2.2-5.8%	2050-2300	48-120	153C / 307F	UL 94 VO	NA	Aero/Auto/Military Production, Testing, FST Rated

Note: ASTM is the testing standard.