

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.
PA 12	Tough & Durable	HP Multi Jet Fusion	Nylon	Black	48	20%	1700	NA	175C / 347F	NA	NA	Production, Fit & Function, Testing, Chemical Resistant

Note: ASTM is the testing standard.