

Material Guide for Stratasys Fortus, Uprint and Mojo

Standard Thermoplastics

Material Click for Spec sheets	At a glance	Details	Layer Resolution
ABS plus	Standard plastic	This standard Abs is mechanically strong and stable over time	T10 .1270mm T12 .1778mm T16 .254mm T20 .3302mm
ABS M30i	Bio compatible, sterilisable engineering plastic	ABS-M30i works with FDM Technology to build functional prototypes, tooling and production parts that can be gamma or EtO sterilized. This engineering thermoplastic has good mechanical strength and complies with ISO 10993 and USP Class VI. -	T10 .1270mm T12 .1778mm T16 .254mm T20 .3302mm
ASA	Uv resistant, durable standard plastic	Mechanical strength and UV stability make ASA a great choice for functional prototyping. Finer finish than ABS	T10 .1270mm T12 .1778mm T16 .254mm T20 .3302mm

Engineering Thermoplastics

Material Click for Spec sheets	At a glance	Details	Layer Resolution
Nylon 12	Tough for advanced applications	Nylon 12 parts built on a Fortus 3D Production System are the toughest in the industry, exhibiting 100-300 percent better elongation at break and superior fatigue resistance over any other additive manufacturing technology. Nylon offers the best Z-axis lamination and highest impact strength of any FDM thermoplastic, as well as excellent chemical resistance	T12 .1778mm T16 .254mm T20 .3302mm
PC	Strong engineering plastic	PC's high tensile and flexural strength make it ideal for demanding prototyping needs, tooling and fixtures, and patterns for metal bending and composite work. Low-volume manufacturing and customization become feasible, and testing provides more confidence.	T12 .1778mm T16 .254mm T20 .3302mm

High-Performance Thermoplastics

Material <small>Click for Spec sheets</small>	At a glance	Details	Layer Resolution
Ultem 1010	<p>Strongest tensile strength most heat resistant and chemical resistant material</p>	<p>ULTEM 1010 resin offers the highest heat resistance, chemical resistance and tensile strength of any FDM thermoplastic. The certified grade of this material is biocompatible and approved for food contact with NSF 51 and ISO 10993/USP Class VI certifications.</p> <p>Produce large custom tools for metal, plastic or composite parts fabrication; 3D print medical tools like surgical guides that can withstand steam autoclaving; build temperature-resistant dies, patterns and fixtures for food production; even manufacture out-of-cabin aerospace components and under-the-hood automotive components including housings, ducts and semi-structural components.</p> <p>ULTEM 1010 resin is available in a general-purpose grade (ULTEM 1010) as well as a certified grade (ULTEM 1010 CG) for customers who want to take advantage of food-contact and bio-compatibility certifications for special applications including food production tools and custom medical applications. *Break away support.</p>	<p>T14 .254mm</p>
ULTEM 9085	<p>FST rated high performance plastic. Best mix of mechanical, chemical and thermal properties.</p>	<p>Ideal for aerospace, automotive and military applications because of its FST rating, high strength-to-weight ratio and existing certifications. It empowers design and manufacturing engineers to 3D print advanced functional prototypes and production parts.</p> <p>ULTEM 9085 resin expands the use of 3D printing into applications that demand good thermal and chemical resistance. Advanced applications include functional prototypes, manufacturing tools and low-volume, high-value production parts.</p> <p>It's certifications, FST rating, and high strength-to-weight ratio make it ideal for manufacturing automotive components and other strong, durable parts suitable for end use. *Break away support.</p>	<p>T16 .254mm</p>

For more information, see [Statasys 3D Printing Materials](#)