

SLS Material Printability Chart

	<u>Nylon 12</u> Recommended	<u>Nylon 11</u>	<u>Nylon 12 GF</u>	<u>Nylon 11 CF</u>	<u>TPU 90A</u>	<u>Nylon 12 White</u>	<u>Nylon 12 Tough</u>
Air / Inert Recommendation	Air	Nitrogen**	Air	Nitrogen	Air	Nitrogen**	Air
Refresh Rate	30%	30%	50%	30%	20%	30%	20%
Printer Compatibility	Fuse 1, Fuse 1+	Fuse 1+	Fuse 1, Fuse 1+	Fuse 1+	Fuse 1, Fuse 1+	Fuse 1+	Fuse 1+
Dimensional Accuracy	Best	Good	Best	Good	Fair	Good	Best
Surface Finish	Best	Good	Best	Good	Fair	Good	Good
Print Speed	Best	Fair	Fair	Fair	Good	Fair	Good
Fine Feature Resolution	Best	Fair	Fair	Fair	Good	Good	Best
High Aspect Ratio Parts	Best	Fair	Good	Good	Fair	Best	Best
Large Cross Section Parts	Good	Fair	Good	Good	Fair	Good	Best
Material Properties							
Tensile Strength	Best	Best	Good	Best	Not Recommended	Best	Good
Impact Resistance	Good	Best	Good	Best	–	Good	Best
Elongation	Fair	Good	Not Recommended	Fair	Best	Fair	Good
Temp Resistance	Fair	Not Recommended	Good	Best	Not Recommended	Fair	Not Recommended
Low Moisture Absorption	Fair	Best	Good	–	Fair	Not Recommended	Good
Lightweight / Density	Good	Good	Fair	Good	Good	Good	Good
See It In Use	 Kling & Freitag	 MAG Orthotics	 JasperEngines	 TUM	 Artus3D	Coming Soon!	Coming Soon!

**Nylon 11 is recommended to print in Nitrogen environment. Printing in air is possible but will compromise material properties and lead to powder degradation at a faster rate.

**Nylon 12 White Powder is recommended to print in Nitrogen to maintain the most consistent white appearance. Printing in air has been correlated with yellowing of powder over time.

Powder yellowing has little to no impact on the ability and efficacy of dyeing printed parts.