

Materials Guide

Click the material name to learn more.



Material Name	Description	Finishes	Colors Available	Lead Time	Advantages/Value Props	Applications
Versatile Plastic	Versatile Plastic is a durable nylon plastic that can be used for a wide range of applications, both for prototyping and for end products. Printed using Selective Laser Sintering (SLS), when thin, it's flexible enough for hinges and springs and when thick, it's strong enough for structural components. Try the Premium finish for a higher quality look and feel.	Natural Processed Premium		4 - 6 BD 4 - 6 BD 4 - 6 BD	Fast delivery, strong and durable, affordable, many colors, skin safe, good chemical resistance, interlocking, complex geometry	Cases, mechanical parts, prosthetics, fixtures, tech accessories, art home decor, jewelry, prototypes, figurines
Professional Plastic	Professional Plastic is HP's nylon plastic with excellent mechanical properties and a smooth, finished and semi-glossy surface, making it an ideal choice for a wide range of applications from industrial parts to high quality finished goods.	Natural		6 - 12 BD	Watertight, strong and durable, complex geometry, thin features functional, watertight, good chemical resistance, professional finish, homogenous properties, skin safe, interlocking	Mechanical & structural parts, mounts, cases, eye frames, tech accessories, drone parts, home decor, miniatures, art, prosthetics
Fine Detail Plastic	Fine Detail Plastic is an acrylic material capable of extremely high detail and is a popular choice for hobbyists creating scale models, miniature sets, and other decorative products.	Smooth Smoothest		4 - 6 BD 4 - 6 BD	High level of detail, thin features, complex geometry, interlocking, smooth surface (ideal for painting)	Scale Models, Miniatures, Jewelry Prototypes, Mold Masters
Steel	Steel is an affordable and strong metal that is 60% steel and 40% bronze and can range in color from a silver gray to reddish bronze. It is strong enough for metal parts like bottle openers and dice, but is not recommended for industrial load bearing applications.	Matte Polished		9 - 11 BD	Good strength, multiple finishes, complex geometry	Tools & Accessories, Dice, Home Decor, Small Sculptures
Aluminum	Aluminum is a light and strong material recommended for functional parts requiring high strength, stiffness, low weight and high accuracy.	Natural		15 BD	Strength, Lightweight, Good dimensional accuracy, corrosion resistant	Mechanical parts, Tools and Fixtures, Bike and Drone Accessories, Structural Components
Sandstone	Full Color Sandstone offers multi-color printing, making it the best material for figurines, architecture, medical models and other applications that require many colors.	Natural, Matte, Glossy		6 BD	Full color, complex geometry, multiple finishes	Figurines, Architecture, Terrain, Scans, Art Sculptures, Avatars
Bronze	Bronze is a copper-tin alloy with a deep red color (similar to rose gold) commonly used in jewelry, accessories, and home decor.	Natural Polished		8 - 10 BD	High quality, professional finish, high level of detail, interlocking	Jewelry, Fashion Accessories, Home Decor, Prototypes, Miniatures
Brass	Brass is a copper alloy containing 15% zinc, 5% tin and 80% copper and is capable of showcasing intricate details and offers a professional, finished look and feel. Brass will tarnish over time, but can be polished back to achieve a like-new surface.	Natural Polished		8 - 10 BD	High quality, professional finish, high level of detail, interlocking	Jewelry, Fashion Accessories, Home Decor, Prototypes, Miniatures
Silver	Sterling Silver (92.5% silver) is a high quality silver alloy commonly used in jewelry and other skin-safe applications.	Natural Polished Fine Detail Polished Antique		8 - 10 BD	High quality, professional finish, high detail, good electrical conductivity, long-term wear, precious metal, skin friendly, interlocking	Women's and Men's Jewelry including Bracelets, Pendants, Rings, Cufflinks, and Tie Bars
Gold Plated Brass	Gold Plated Brass is plated with 14K or 18K gold (depending on your choice) and is available in both yellow and rose colors.	14k or 18k		10 BD	High quality, professional finish, high level of detail, interlocking	Women's and Men's Jewelry including Bracelets, Pendants, Cufflinks, and Tie Bars
Rhodium Plated Brass	Rhodium Plated Brass offers a shiny, mirror-like finish that is popular for both Men and Women's jewelry.	N/A		10 BD	High quality, professional finish, high level of detail, interlocking	Women's and Men's Jewelry including Bracelets, Pendants, Cufflinks, and Tie Bars
Gold	Gold is our premium metal, available in yellow, white and rose colors and 14K and 18K.	14k or 18k		9 BD	Precious metal, high quality material, professional finish, high level of detail, interlocking, long term wear, skin friendly	Women's and Men's Jewelry including Bracelets, Pendants, Rings, Cufflinks, and Tie Bars
Platinum	Platinum is capable of showcasing intricate details and offers a professional, finished look and feel. Platinum consists of 95% Platinum and 5% Ruthenium.	N/A		11 BD	Precious metal, high quality material, professional finish, high level of detail, interlocking, long term wear, skin friendly	Women's and Men's Jewelry including Bracelets, Pendants, Rings, Cufflinks, and Tie Bars