

# EOS Materials Plastic

Product class	Product name	Colour of laser-sintered parts	Main properties	Typical applications
Polyamide 12	PA 2200	white	<ul style="list-style-type: none"> <li>Multipurpose material</li> <li>Balanced property profile</li> </ul>	<ul style="list-style-type: none"> <li>Functional parts</li> </ul>
	PrimePart® PLUS (PA 2221)	natural	<ul style="list-style-type: none"> <li>Economical multipurpose material</li> <li>Balanced property profile</li> <li>Variety of certificates available (Biocompatibility, Food contact)</li> </ul>	<ul style="list-style-type: none"> <li>Functional parts</li> </ul>
	PA 2202 black	anthracite black	<ul style="list-style-type: none"> <li>Balanced property profile</li> <li>Pigmented throughout</li> </ul>	<ul style="list-style-type: none"> <li>Functional parts in anthracite black colour</li> </ul>
Polyamide 12, glass bead filled	PA 3200 GF	whitish	<ul style="list-style-type: none"> <li>High stiffness</li> <li>Wear resistance</li> <li>Improved temperature performance</li> </ul>	<ul style="list-style-type: none"> <li>Stiff housings</li> <li>Parts with requirements on wear and abrasion</li> <li>Parts used under elevated thermal conditions</li> </ul>
Polyamide 12, aluminium filled	Alumide®	metallic grey	<ul style="list-style-type: none"> <li>Easy post-processing, good machinability</li> <li>High temperature performance</li> <li>Thermal conductivity (limited)</li> <li>High stiffness</li> </ul>	<ul style="list-style-type: none"> <li>Applications with metallic finish</li> <li>Parts requiring machining</li> <li>Parts with thermal loads</li> </ul>
Polyamide 12, carbon fibre reinforced	CarbonMide®	anthracite black	<ul style="list-style-type: none"> <li>Extreme strength and stiffness</li> <li>Thermal and limited electrical conductivity</li> <li>Best strength / weight ratio</li> </ul>	<ul style="list-style-type: none"> <li>Light and stiff functional parts</li> <li>Metal replacement</li> </ul>
Polyamide 11	PA 1101	natural	<ul style="list-style-type: none"> <li>High ductility and impact resistance</li> <li>Otherwise balanced property profile (similar to PA 2200)</li> <li>From renewable sources</li> </ul>	<ul style="list-style-type: none"> <li>Functional parts requiring impact resistance</li> <li>Parts with functional elements like film hinges</li> </ul>
	PA 1102 black	black	<ul style="list-style-type: none"> <li>Similar to typical applications for PA 1101</li> <li>Additionally: black, mass-coloured applications, which remain black even under abrasive wear / scratching</li> </ul>	<ul style="list-style-type: none"> <li>Similar to typical applications for PA 1101</li> <li>Additionally: black, integrated colour</li> <li>Through mass-colourisation suitable for scratch resistant parts</li> </ul>
For special applications				
Polyamide 12	PA 2201	natural	<ul style="list-style-type: none"> <li>Multipurpose material</li> <li>Material primarily for use in North America</li> </ul>	<ul style="list-style-type: none"> <li>Functional parts</li> </ul>
	PA 2105	light beige	<ul style="list-style-type: none"> <li>Highest dimensional accuracy</li> <li>High surface quality and detail resolution</li> </ul>	<ul style="list-style-type: none"> <li>Dental</li> </ul>
Polyamide 12, flame retardant	PA 2210 FR	white	<ul style="list-style-type: none"> <li>Flame retardancy</li> <li>Halogen-free material</li> </ul>	<ul style="list-style-type: none"> <li>Aerospace</li> <li>Electric and electronics</li> </ul>
	PrimePart® FR (PA 2241 FR)	white	<ul style="list-style-type: none"> <li>Economic flame-retardant material</li> <li>Material certificates available (flammability)</li> </ul>	<ul style="list-style-type: none"> <li>Aerospace</li> </ul>
TPE-A Polyetheramide-Block-Copolymer	PrimePart® ST (PEBA 2301)	white	<ul style="list-style-type: none"> <li>Rubber-like flexibility (Shore D ≈ 35)</li> <li>No infiltration necessary</li> </ul>	<ul style="list-style-type: none"> <li>Damping devices, bumpers / cushions, gaskets / gasket seals, shoe sole elements</li> </ul>
Polystyrene	PrimeCast® 101	grey	<ul style="list-style-type: none"> <li>High dimensional accuracy</li> <li>Low residual ash content (when burned)</li> </ul>	<ul style="list-style-type: none"> <li>Master patterns for investment casting</li> <li>Master patterns for vacuum casting</li> <li>Economical visual prototypes</li> </ul>
Polyaryletherketone	EOS PEEK HP3	beige-brown	<ul style="list-style-type: none"> <li>High-performance material</li> <li>Excellent temperature performance, strength, stiffness and chemical resistance</li> <li>Excellent wear resistance</li> <li>Inherently flame retardant</li> <li>Potentially biocompatible (component testing required) and sterilisable</li> </ul>	<ul style="list-style-type: none"> <li>Metal replacement</li> <li>Aerospace</li> <li>Automotive and motorsports</li> <li>Electric and electronics</li> <li>Medical</li> <li>Industrial</li> </ul>