

# EOS Materials Plastic

## Technical Data

PM

Product class	Product name	Colour of lasersintered parts	Main properties	Typical applications
Polyamide 12	PA 2200	white	→ Multipurpose material → Balanced property profile	Functional parts
	PrimePart® PLUS (PA 2221)	natural	→ Economical multipurpose material → Balanced property profile → Variety of certificates available (Biocompatibility, Food contact)	Functional parts
	PA 2202 black	anthracite black	→ Balanced property profile → Pigmented throughout	Functional parts in anthracite black colour
Polyamide 12, glass bead filled	PA 3200 GF	whitish	→ High stiffness → Wear resistance → Improved temperature performance	Stiff housings Parts with requirements on wear and abrasion Parts used under elevated thermal conditions
Polyamide 12, aluminium filled	Alumide®	metallic grey	→ Easy post-processing, good machinability → High temperature performance → Thermal conductivity (limited) → High stiffness	Applications with metallic finish Parts requiring machining Parts with thermal loads
Polyamide 12, carbon fibre reinforced	CarbonMide®	anthracite black	→ Extreme strength and stiffness → Thermal and limited electrical conductivity → Best strength / weight ratio	Light and stiff functional parts Metal replacement
Polyamide 11	PA 1101	natural	→ High ductility and impact resistance → Otherwise balanced property profile (similar to PA 2200) → From renewable sources	Functional parts requiring impact resistance Parts with functional elements like film hinges
	PA 1102 black	black	→ Similar to typical applications for PA 1101 → Additionally: black, mass-coloured applications, which remain black even under abrasive wear / scratching	Similar to typical applications for PA 1101 Additionally: black, integrated colour Through mass-colourisation suitable for scratch resistant parts
<b>For special applications</b>				
Polyamide 12	PA 2201	natural	→ Multipurpose material → Material primarily for use in North America	Functional parts
	PA 2105	light beige	→ Highest dimensional accuracy → High surface quality and detail resolution	Dental
Polyamide 12, flame retardant	PA 2210 FR	white	→ Flame retardancy → Halogen-free material	Aerospace Electric and electronics
	PrimePart® FR (PA 2241 FR)	white	→ Economic flame-retardant material → Material certificates available (flammability)	Aerospace
TPE-A Polyetheramide-Block-Copolymer	PrimePart® ST (PEBA 2301)	white	→ Rubber-like flexibility (Shore D ≈ 35) → No infiltration necessary	Damping devices, bumpers / cushions, gaskets / gasket seals, shoe sole elements
Polystyrene	PrimeCast® 101	grey	→ High dimensional accuracy → Low residual ash content (when burned)	Master patterns for investment casting Master patterns for vacuum casting Economical visual prototypes
Polyaryletherketone	EOS PEEK HP3	beige-brown	→ High-performance material → Excellent temperature performance, strength, stiffness and chemical resistance → Excellent wear resistance → Inherently flame retardant → Potentially biocompatible (component testing required) and sterilisable	Metal replacement Aerospace Automotive and motorsports Electric and electronics Medical Industrial
Polypropylen	EOS PP 1101	natural	→ Excellent chemical persistence → Suitable for continuous exposure to liquids	Chemical reactors Tanks and piping Automotive Industry

Detailed information: [www.eos.info/material-p](http://www.eos.info/material-p)

