

# EOS Materials Plastic

## Technical Data

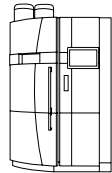
Product class	Product name	Colour of lasersintered parts	Main properties	Typical applications
Polyamide 12	PA 2200	white	→ Multipurpose material → Balanced property profile	Functional parts
	PA 2202 black	anthracite black	→ Balanced property profile → Pigmented throughout	Functional parts
Polyamide 12, 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 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 properties as PA 1101 → Mass-coloured, parts remain black even under abrasive wear	Similar to typical applications for PA 1101
<b>For special applications</b>				
Polyamide 12	PA 2201	natural	→ Multipurpose material → Material primarily for use in North America	Functional parts
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
Polystyrene	PrimeCast® 101	grey	→ High dimensional accuracy → Low residual ash content (when burned)	Master patterns for investment and vacuum casting
Polyetherketoneketone, carbon fiber reinforced	HT-23	grey	→ Extreme strength and stiffness → Thermal and limited electrical conductivity → Best strength / weight ratio	Light and stiff functional parts Metal replacement
Polypropylen	EOS PP 1101	natural	→ Excellent chemical persistence → Suitable for continuous exposure to liquids	Chemical reactors Tanks and piping
Thermoplastic Elastomer	EOS TPU 1301	white	→ Great resilience after deformation, good hydrolysis resistance, high UV-stability	Protective gear, soles Damping elements Gaskets, bellows, pipes

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







# Compatibility of Polymer Materials and Systems



Product name  
Layer thickness




### Polyamide 12

-  PA 2200®  
60 | 100 | 120 µm
-  PA 2201  
100 µm
-  PA 3200 GF  
100 µm
-  Alumide®  
100 µm


### Polyamide 11

-  PA 1101  
100 µm
-  PA 1102 black  
100 µm

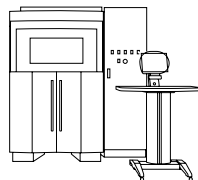
### Polypropylene

-  PP 1101  
100 µm

### Polystyrene

-  PrimeCast®101  
100 µm





FORMIGA P 110 *Velocis*



### Polyamide 12

-  PA 2200®  
60 | 100 | 120 | 150 | 180 µm
-  PA 2201  
100 | 120 µm
-  PA 2210 FR  
150 µm
-  PrimePart FR (PA 2241 FR)  
100 | 150 µm
-  PA 3200 GF  
120 | 150 µm
-  PA 640 GSL  
120 µm
-  Alumide®  
120 | 150 µm


### Polyamide 11

-  PA 1101  
120 µm
-  PA 1102 black  
120 µm
-  HP 11-30  
120 µm
-  FR-106  
120 µm


### Thermoplastic elastomer

-  EOS TPU 1301  
120 µm

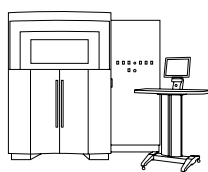
### Polypropylene

-  PP 1101  
120 µm

### Polystyrene

-  PrimeCast®101  
150 µm



EOS P 396



### Polyamide 12

-  PA 2200®  
60 | 100 | 120 | 150 | 180 µm
-  PA 2201  
100 | 120 | 150 µm
-  PA 2210 FR  
150 µm
-  PrimePart FR® (PA 2241 FR)  
100 | 150 µm
-  PA 3200 GF  
100 | 150 µm
-  Alumide®  
100 | 150 µm


### Polyamide 11

-  PA 1101  
120 µm
-  PA 1102 black  
120 µm

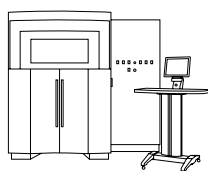
### Thermoplastic elastomer

-  EOS TPU 1301  
120 µm


### Polystyrene

-  PrimeCast®101  
150 µm

EOS P 770



### Polyaryletherketon

-  HT 23  
120 µm

EOS P 810