## EOS Materials Plastic
### Technical Data

<table>
<thead>
<tr>
<th>Product class</th>
<th>Product name</th>
<th>Colour of lasered parts</th>
<th>Main properties</th>
<th>Typical applications</th>
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</table>
| 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 |
| Polyamide 12, flame retardant | 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 |
| Polypropylene | EOS PP 1101 | natural | → Excellent chemical persistence  
                          → Suitable for continuous exposure to liquids | Chemical reactors  
Tanks and piping  
Automotive piping  
Industrials |

Details information: [www.eos.info/materials](http://www.eos.info/materials)