Ultrafuse® Filaments

Product Range

Our experts for Fused Filament Fabrication (FFF) provide you with an extensive range of materials offering a variety of beneficial material properties such as ease of print, dimensional stability, durability, and flexibility. Whether its standard filaments, filaments for high temperatures and engineering or filaments for temporary support material – our product range Ultrafuse® offers applications for both Bowden and direct-driven extrusion systems.

**Standard**

- **Ultrafuse® PLA**
  - Biodegradable polymer
  - Low melting point
  - Easy to print
  - Wide range of colors

- **Ultrafuse® ABS**
  - Direct printing on heated glass or print bed surfaces
  - High heat resistance
  - Easy to print

- **Ultrafuse® PET**
  - Premium, food approved raw material
  - Good layer adhesion
  - Easy to handle

**Sustainable**

- **Ultrafuse® rPET**
  - Made from recycled PET
  - Environmentally friendly
  - Good mechanical characteristics

**Engineering**

- **Ultrafuse® PLA PRO1**
  - Can be tuned towards tremendous speed and excellent surface finish
  - Truly consistent filament

- **Ultrafuse® PP**
  - Low density
  - Chemical resistance
  - Resistance to fatigue
  - Elasticity and toughness
  - Insulation

- **Ultrafuse® ASA**
  - High outdoor weatherability
  - Chemical resistance
  - Heat resistance
  - High gloss
  - Good anti-static properties
  - Tough and rigid

- **Ultrafuse® ABS Fusion+**
  - Chemical resistance
  - High heat resistance
  - Low warping
  - Adheres to water-soluble support
  - Tough

**Ultrafuse® PET CF15**

- High dimensional stability
- Heat resistance up to 74°C
- Low abrasion
- Compatible with soluble support
- Strong and stiff parts
- Excellent surface finish

**Ultrafuse® PP GF30**

- Extremely high stiffness
- High heat resistance
- Chemical resistance

**Ultrafuse® PA**

- Good fatigue resistance
- Low melting point, printable for many FFF printers
- Good wear resistance/lubricity

**Ultrafuse® PAHT CF15**

- Higher chemical resistance than most PA grades
- Strong and stiff parts
- High dimensional stability
- Easy to process
- Low moisture absorption

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Ultrafuse® PEI
- Short-term temperature resistance up to 186°C
- Excellent dimensional stability
- Inherent flame retardancy with low smoke evolution
- Long-term hydrolytic stability

Ultrafuse® PPSU
- Inherently flame retardant
- Short-term temperature resistance up to 220 °C
- Resistance to long-term service temperatures up to 180 °C
- High dimensional stability
- Creep strength at high temperatures

Support
Ultrafuse® HiPS
- Good impact resistance
- Good dimensional stability
- Easy post-processing

Ultrafuse® BVOH
- Easily dissolves in water
- Great compatibility to PLA, PLA PRO1, ABS Fusion+, PA and PAHT CF15

Flexible
Ultrafuse® TPC 45D
- Excellent adhesion in Z-direction

Ultrafuse® TPU (85A, 95A, 64D)
- Extremely flexible yet still tough
- Good chemical resistance
- Abrasion-resistance

Ultrafuse® TPS 90A
- Outstanding impact strength even at temperatures below freezing point
- Excellent aesthetics and soft-touch haptics
- Printable on Bowden tube printer

Metal
Ultrafuse® 316L
- Cost advantage for small and medium-sized components
- Full stainless steel parts with a high degree of complexity

Ultrafuse® 17–4 PH
- High mechanical strength and hardness
- Good corrosion resistance
- Fully hardened enables highest strength

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