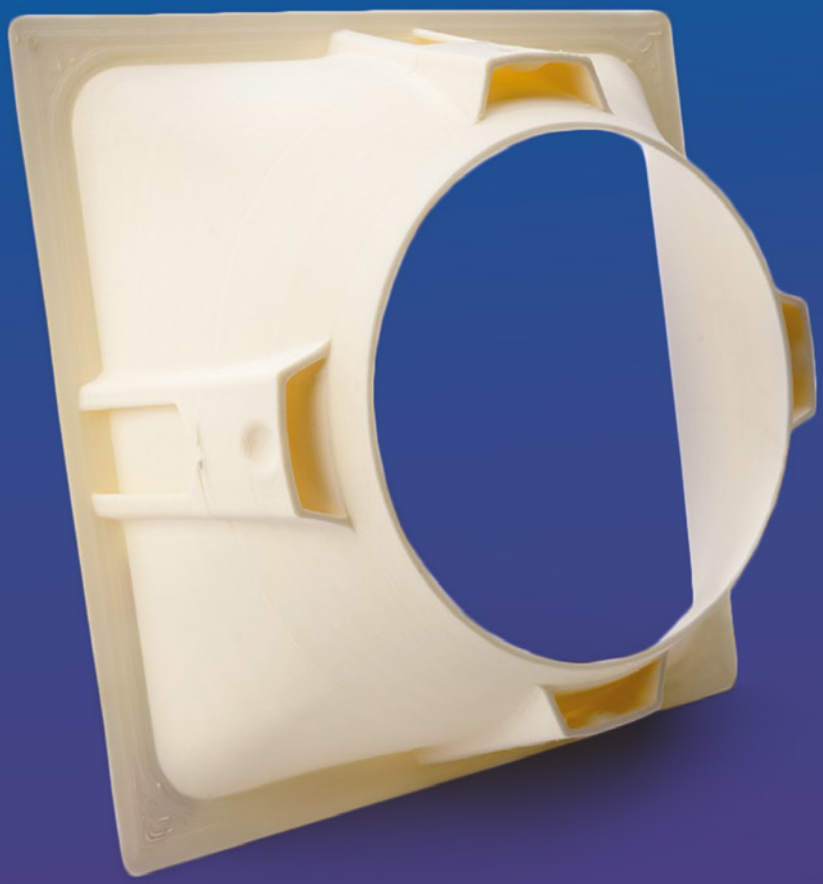

# Addigy® F1030 FR

Fused Filament Fabrication

covestro

# Addigy® F1030 FR

**Addigy® F1030 FR** is a UL Blue Card certified, non-halogenated, open platform solution for applications requiring flame retardancy as a regulatory requirement.

Printing a part that requires flame retardancy on an open system has often meant having to turn to materials that were overspecified for the application, simply because no alternatives.

Covestro now has a solution: **Addigy® F1030 FR**, the first ever UL Blue Card certified PA6/66 filament for open systems. Now applications can be printed that require UL certification on flammability, such as enclosures for electric or lighting applications, connectors and more. UL's Blue Card program is specially developed for certification of materials for additive manufacturing. **Addigy® F1030 FR** is completely halogen-free, making it more environmentally friendly than alternative flame retardant filaments.

The UL94 V test performed on plastic materials measures flammability characteristics, examining how the material either extinguishes or spreads a flame once ignited.

Validated in an UL-certified lab, the Covestro material achieved a UL 94 rating of V-0 at 1.6 & 3.2 mm wall thickness and a UL 94 V-2 rating at 0.85 mm wall thickness. This means that the material, after ignition, extinguishes by itself in maximum 10 (V-0) and 30 (V-2) seconds. UL requires Blue Cards for 3D printing materials to be printer specific; this material was tested on an Ultimaker S5 printer. Nevertheless, being an open platform material, users with any open platform fused filament fabrication system can work with **Addigy® F1030 FR**.

### Key Benefits

- UL Blue Card certified
- Non-halogenated
- More environmentally friendly
- Open platform solution
- Easy to print
- A cost-effective alternative to other flame retardant materials

### Ideal Applications

- Automotive connectors
- Electric and electronic connectors and enclosures
- Lighting enclosures

## Technical Data

| Technical Data | Dry | Unit | Test Method |
|---|---|---|---|
| Tensile modulus | 3,500 / – | MPa | ISO 527-1/-2 |
| Yield stress | 57 / – | MPa | ISO 527-1/-2 |
| Yield strain | 2,8 / – | % | ISO 527-1/-2 |
| Stress at break | 50 / – | MPa | ISO 527-1/-2 |
| Strain at break | 7 / – | % | ISO 527-1/-2 |
| Charpy impact strength (+23°C) | 29,7 / – | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | 3 / – | kJ/m² | ISO 179/1eA |

These values may vary and depend on individual machine processing and post-curing practices.

**More information at am.covestro.com**

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