



# Addigy® F1070

Fused Filament Fabrication



**Addigy® F1070** is an engineering grade PA6 filament for high temperature resistant applications subject to harsh environments.

**Addigy® F1070** shows excellent layer-to-layer adhesion and good mechanical properties, suitable for harsh environments. The filament is optimized for ductility and stiffness, has good mechanical properties and offers high interlayer strength. **Addigy® F1070** was originally developed as a specialty product to meet the demand for high service levels in the automotive and electronic industries. **Addigy® F1070** is a very ductile, strong polymer suitable for harsh environments and high temperatures (up to 150°C).

### Key Benefits

- Engineered material optimized for ductility and stiffness
- Parts with high inter-layer strength durable parts with good mechanical properties
- Unique Covestro co-polyamide technology
- High temperature resistant material up to 150°C
- Suitable for harsh environments
- Available in black and white, 2.85 and 1.75 diameters

### Ideal Applications

- Air intake parts, door handles, engine covers, radiator grills
- Circuit breakers, connectors, tubes for wiring, cable protectors
- Ski binders

## Technical Data

Mechanical properties (injection molded)	Dry / Cond	Unit	Test Method
Tensile modulus	2,590 / 710	MPa	ISO 527-1/-2
Yield stress	77 / 40	MPa	ISO 527-1/-2
Yield strain	4.2 / 26	%	ISO 527-1/-2
Stress at break	47 / 48	MPa	ISO 527-1/-2
Strain at break	>50 / >50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N / -	kJ/m <sup>2</sup>	ISO 179/1eU

Thermal properties	Dry / Cond	Unit	Test Method
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3

Thermal properties (injection molded)	Dry / Cond	Unit	Test Method
Temp. of deflection under load (1.80 MPa)	54 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	104 / *	°C	ISO 75-1/-2

Other properties	Dry / Cond	Unit	Test Method
Water absorption	12 / *	%	Sim. to ISO 62
Humidity absorption	3.5 / *	%	Sim. to ISO 62
Density	1,120 / -	kg/m <sup>3</sup>	ISO 1183

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

[More information at am.covestro.com](https://www.am.covestro.com)



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<sup>1</sup>Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

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