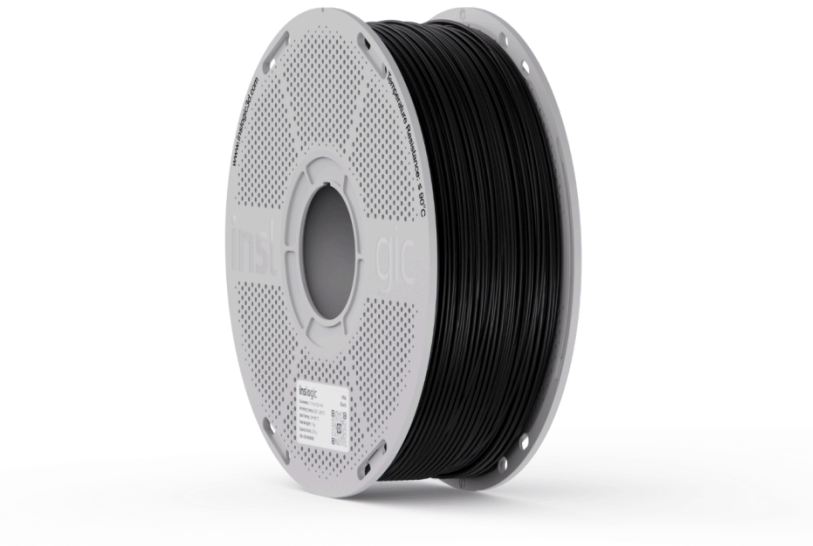


## TECHNICAL DATA SHEET Inslogic ASA Filament



Inslogic ASA filament is an improved functional material engineered for mechanical parts and outdoor applications. It is UV and weather resistant, as well as temperature resilience, making it ideal for diverse applications.

### Key Features

- Low warping
- UV and weather resistant
- Better layer adhesion
- Improved mechanical properties and strength
- High precision with fine detail
- Heat resistance

### Applications

- Prototyping
- Tooling
- Mechanical parts
- Housing components
- Objects meant for long-time outside use



### Specifications

Material Name	Inslogic ASA
Chemical Name	Acrylonitrile Styrene Acrylate
Diameter	1.75 ± 0.02 mm
Net Filament Weight	1 kg

### Recommended Print Settings

Drying Settings	80 °C, 4h
Nozzle Size	0.2, 0.4, 0.6 mm
Nozzle Temperature & Printing Speed	250 - 260 °C at 50 - 100 mm/s 260 - 280 °C at 100 - 200 mm/s
Bed Temperature	80 - 100 °C
Cooling Fan Speed	100%
Bed Type	Smooth PEI Sheet, High Temperature Plate

### Physical Properties

Property	Method	Metric
Density	ISO 1183	1.05 g/cm <sup>3</sup>
Melting Temperature, 10 °C/min	ISO 11375-3	120 °C
Glass Transition Temperature, 10 °C/min	ISO 11375-3	108 °C
Heat Deflection Temperature at 0.45 MPa	ISO 75	98°C
Percentage Shrinkage at 23 °C	ISO 294	0.4 - 0.9 %



## Mechanical Properties

Property	Method	Metric
Tensile Strength	ISO 527/2	52.40 MPa
Elongation at Break	ISO 527/2	21.40%
Flexural Strength	ISO 178	75.20 MPa
Flexural Modulus	ISO 178	2162 MPa
Izod Impact, Notched	ISO 180	18.33 KJ/m <sup>2</sup>



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