

ASA

Acrylonitrile Styrene Acrylate

ASA is a UV-resistant, weatherable polymer, our ASA has a low-gloss matte finish that makes it a perfect filament for end use parts – especially when you don't want the high-gloss surface finish often associated with many other 3D printing materials such as ABS or PETG.

ASA's superior UV, heat and wear resistance makes it an ideal material for outdoor applications that will experience exposure to the sun and weather. ASA's exceptional mechanical and thermal properties—coupled with excellent UV-stability—is why this filament is used by the Auto, Marine, and RV industries for exterior applications.

Mechanical Properties	Standard	Value	Unit
Ultimate Tensile Strength	ISO 527	45	MPa
Tensile Modulus	ISO 527	2010	MPa
Elongation at Break	ISO 527	10	%
Flexural Strength	ISO 178	78	MPa
Flexural Modulus	ISO 178	2000	MPa
Hardness Shore	Standard	Value	Unit
Hardness			

Thermal Properties	Standard	Value	Unit
HDT @ 0.45 MPa	ISO 75	95	°C
Glass Transition Temp	DSC	105	°C

Physical Properties	Standard	Value	Unit
Minimum Part Density	ISO 1183	1.07	g/cm ³

Certifications and Tests	Standard	Value	Unit
Flammability (UL 94)			
USP Class VI Certified			

Characteristics

- Excellent UV Stability / UV Resistance
- High impact, wear, and heat resistance
- Durable
- Excellent surface finish

Applications

- Mirror Housings
- Cowl Covers
- Radiator Grills
- Sensor Housings
- Items for outdoor use
- Manufacturing aids and fixtures
- End-use parts
- Production tools
- Functional prototypes
- Automotive exterior parts
- Housing components
- Sporting goods
- Garden equipment

Considerations

- Releases potentially dangerous fumes, therefore ensure your HEPA filter is always ON while printing.
- Mildly sensitive to moisture, so make sure to dry & store properly. You may also use an MMS while printing.
- Requires a high bed temperature and heated enclosure, which all of our printers provide.
- Parts can crack, warp and/or shrink due to the makeup of the material, but our print settings can help override many of these potential issues.

Printing Skill & Experience: Beginner Intermediate Advanced Expert

- ASA, like ABS, is easy to 3D print.

Printer Compatibility

<input checked="" type="checkbox"/> 3ntr A2v4	<input checked="" type="checkbox"/> 3ntr A4v4	<input type="checkbox"/> EVO-T	<input type="checkbox"/> EVO22-T
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Available Colors from [TRAK](#): Black, Red, Natural