

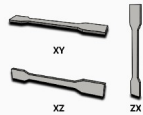
DESCRIPTION

ASA is one of the most popular technical filaments because it offers high UV, water and chemical resistance. Its optimal performance and longevity in demanding environments make it perfect for electrical housings, tools, outdoor appliances, sporting goods and molded components.

KEY BENEFITS

- UV resistant
- Weather resistant
- Water resistant
- Chemical resistant
- Outdoor-grade
- Long-lasting

MECHANICAL PROPERTIES



BUILD ORIENTATION KEY

Each tensile bar was printed flat (XY), on its side (XZ) or upright (ZX). The columns below report each build orientation's measured values —ZX (across layers) is the weakest axis.

PROPERTY	STANDARD	XY	XZ	ZX	UNIT
Tensile strength	ISO 527-2	41.1	42.8	18.5	MPa
Yield strength	ISO 527-2	31.7	31.9	/	MPa
Tensile modulus	ISO 527-2	2000	2000	1600	MPa
Strain at yield	ISO 527-2	5.8	3.9	1.3	%
Flexural strength	ISO 178	64.8	68.1	28.2	MPa
Flexural modulus	ISO 178	2000	2100	1600	MPa
TEST SPECIMENS Specimens 3D-printed Infill 100% Shells 2 Layer height 0.2 mm					

PRINTING RECOMMENDATIONS

Printing temp.	255 °C
Bed temp.	80 °C
Chamber temp.	70 °C
Recommended speed	≤250 mm/s
Max printing speed	≤1080 mm/s
Retraction	0.8 mm
Cooling	30 %

PHYSICAL & THERMAL

Specific gravity	ISO 1133	1.07 g/cc
Melting temp.	ISO 294	200 –250 °C
Heat deflection temp.	ISO 75	86 °C

HANDLING, STORAGE & THERMAL

Max flow rate	80 mm ³ /s	Max-flow test printer	FLsun T1 Pro
Vicat softening temp.	95 °C	Glass transition temp.	105 °C
Drying temp.	75 °C	Drying time	4–6 h
Enclosed printer	Recommended	Multi-material compatibility	Compatible

TIPS & TRICKS

- **Use an enclosed printer**
A stable 50-55 °C chamber helps reduce warping and layer splits.
- **Ventilate the print area**
ASA fumes require good room ventilation or extraction.
- **Dry thoroughly before printing**
Dry at 75 °C for 4-6 h and store sealed.
- **Avoid drafts**
Cold airflow can crack corners and tall parts.
- **Let parts cool gradually**
Keep the enclosure closed after printing until the part relaxes.
- **Recommended print speed**
Use ≤ 250 mm/s for normal prints; Max Printing Speed is the tested ceiling.

The technical information on this sheet may be revised as new data becomes available. Verify suitability for your own application before use. AzureFilm d.o.o makes no warranties and assumes no liability for any use of this information. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties, or any consequence, arising from the use of such information. Typical values are indicative only and are not to be construed as binding specifications. AzureFilm d.o.o. shall not be held liable for any damage, injury or loss arising from the use of AzureFilm materials in any particular application.