

PA 910

Alloy 910, Nylon 6/69
Polyamide Copolymer

Nylon PA910 is one of the strongest materials available for 3D printing. It is a material with very high tensile and sufficient elongation to maintain a high degree of durability. It has become a trusted additive material for top aerospace and automotive companies globally.

Mechanical Properties	Standard	Value	Unit
Ultimate Tensile Strength	ASTM D638	53.4	MPa
Tensile Modulus	ASTM D638	502	MPa
Elongation at Break	ASTM D638	32	%
Flexural Strength			MPa
Flexural Modulus			MPa
Hardness Shore	Standard	Value	Unit
Hardness			

Thermal Properties	Standard	Value	Unit
HDT @ 0.45 MPa	DSC	140	°C
Glass Transition Temp			°C
Physical Properties	Standard	Value	Unit
Density		1.08	g/cm ³
Certifications and Tests	Standard	Value	Unit
Flammability (UL 94)			
USP Class VI Certified			

Characteristics

- Semi-Flexible
- Impact Resistant
- Fatigue Resistant
- Does not shrink as much as traditional nylons
- Extrudes at a much lower temperature than other nylons
- Chemical resistance, durability

Applications

- Aerospace applications
- Chemical resistant equipment cover
- Industrial parts currently being made of other high tensile polymers
- Large motor mounting
- Industrial vibration isolators and damping parts
- High pressure sand blasting resistant
- Sand blast masking
- Electroplating supports and hangars
- Chemical dip and tank supports
- High end gears and cam

Considerations

- Moisture can play a big part in shrinkage. Less moisture = less shrinkage.

Printing Skill & Experience: Beginner Intermediate Advanced Expert

- Part Warpage – Use brim and N1 support material to minimize the part warpage.

Printer Compatibility

<input checked="" type="checkbox"/> 3nr A2v4	<input checked="" type="checkbox"/> 3nr A4v4	<input checked="" type="checkbox"/> EVO-T	<input checked="" type="checkbox"/> EVO22-T
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Available colors from [Plural AM](#): Black, Natural

Available colors from [Airwolf 3D](#): Black, Natural

*Specifications are subject to change. The information supplied is supplied as informative: user should use it as material selection tool and/or comparison with available materials. User must validate suitability of the printed part and its ability to be used as desired: no warranty can be made (express or implied) to any use of materials. We reserve the right to update our technical data.