ASA TDS

Acrylonitrile Styrene Acrylate

Product Description

AzureFilm ASA Filament is stiffer, stronger and flexible. Added UV resistance makes it perfect for external outdoor use. Most often it is used for the production of prototypes & engineering solutions that withstand higher temperatures or even exposure in the cold, rain, or sea water.

Properties

Physical	Test Condition	Test Method	Unit	ASA
Specific Gravity[MPa]		ASTM D792	-	1,07
Tensile strength 3.2mm	50 mm/min	ASTM D638	kg/cm2	480
Tensile Elongation 3.2mm @ Yield @ Break	 50 mm/min 50 mm/min	ASTM D638	 % %	 >6 25
Tensile Modulus, 3.2mm	1mm/min	ASTM D638	kg/cm2	21,200
Flexural Strength, 3.2mm	15mm/min	ASTM D790	kg/cm2	770
Flexural Modulus, 3.2mm	15mm/min	ASTM D790	kg/cm2	22,500

Test specimens print settings

3D printer: Creator 3
Slicer: FlashPrint
Nozzle diameter: 0,4 mm

Infill: 20 %
Shells: 2
Layer height: 0,3 mm

Nozzle temperature: 250 °C
Bed temperature: 110 °C
Print speed: 50 mm/s

Printing Recommendations

Nozzle temperature: 240 – 260 °C
Heated bed: Recommended 90 – 120 °C)
Print speed: 50 – 100 mm/s
Build platform: Kapton tape, Glass bed, FlashForge original bed