

# 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		ASTM D638		
@ Yield	50 mm/min		%	>6
@ Break	50 mm/min		%	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

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