

# ASA7607NC901-TDS

## ASA for 3D printing

It is a glass fiber reinforced ASA filament with flame-retardant and fire-resistant characteristics, professionally adapted to large-scale equipment for 3D printing pellets. The material fulfills flame retardancy according to UL 94 V-0 (@1.6mm), and it combines high strength, high fluidity, stable extrusion, low warpage, and heat resistance. It also exhibits excellent UV resistance, waterproofing, and aging resistance. It is suitable for printing large-scale models that require certain mechanical properties, flame retardancy, and weather resistance, such as large outdoor leisure buildings, gardening furniture, and art sculptures that are exposed to the outdoors for long periods.

### Part 1 Physical Properties

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1.18
Melt Flow Rate	220°C, 10kg	ISO 1133	g/10min	8

*Note: The typical physical properties are not intended for use as sales specifications.*

### Part 2 Mechanical Properties

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Tensile Strength	50mm/min	ISO 527-1	MPa	45
Elongation @ Break	50mm/min	ISO 527-1	%	8
Flexural Strength	2mm/min	ISO 178	MPa	55
Flexural Modulus	2mm/min	ISO 178	MPa	2400
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m <sup>2</sup>	9

*Note: The typical physical properties are not intended for use as sales specifications.*

### Part 3 Flame Retardancy

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Flame Class Rating	1.6mm	UL94		V0

*Note: The typical physical properties are not intended for use as sales specifications.*

### Part 4 Recommended Processing Conditions

Parameters	Settings
Drying recommendations	80°C in a hot air dryer for 2-4hours
Extrusion Temperature	210-240°C

#### Disclaimer:

The values provided in this data sheet are for reference and comparison purposes only. They should not be used for design specifications or quality control. Actual values may vary depending on printing conditions. The ultimate performance of printed parts depends not only on the material but also on the part design, environmental conditions, and printing conditions. The product specifications are subject to change without notice.

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