

ASA6405NC901-TDS

ASA for 3D printing

It is a thermoplastic engineering material with flame-retardance. The material fulfills flame retardancy according to UL 94 V-0 (@2.0mm) It has high strength, low shrinkage, strong interlayer adhesion, and good toughness. The great performance in both UV resistance, water resistance and thermal stability make it an ideal material in printing complex, ready-to-use components, including final parts, fixtures, functional prototypes with demanding geometries, as well as large-scale leisure architecture and sculpture parts.

Part 1 Physical Properties

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Density	23°C	ISO 1183	g/cm ³	1.28
Melt Flow Rate	220°C, 10kg	ISO 1133	g/10min	12

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	60
Elongation @ Break	50mm/min	ISO 527-1	%	3
Flexural Strength	2mm/min	ISO 178	MPa	70
Flexural Modulus	2mm/min	ISO 178	MPa	2200
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	5

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

Part 3 Flame Retardancy

Testing Item	Testing Condition	Testing Method	Unit	Typical Value
Flame Class Rating	2.0mm	UL94		V0

Note: The typical physical property is not intended for use as a sales specification.

Part 4 Recommended Processing Conditions

Parameters	Settings
Drying Temperature	80°C
Drying Time	2-4h
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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