



ASA

Unionfab

■ Overview

Bambu ASA is a highly durable material that offers exceptional UV, weather, mechanical, and thermal resistance. Its unique combination of properties makes it an ideal material for printing outdoor models (plant signs, mailboxes, wind vanes, etc.) and structural parts that require long term exposure to challenging outdoor conditions.

■ Features

Exceptional temperature resistance	Extraordinary UV resistance
High impact strength and durability	Outdoor use for long-term purpose

■ Physical Properties

Subjects	Test Method	Data
Density	ISO1183	1.05g/cm ³
Melt Index	260°C, 2.16kg	7.0±0.8g/10min
Melting Temperature	DSC, 10°C/min	210°C
Glass Transition Temperature	DSC, 10°C/min	N/A
Crystallization Temperature	DSC, 10°C/min	N/A
Vicar Softening Temperature	ISO 306, GB/T 1633	106°C
Heat Deflection Temperature	ISO 75 1.8Mpa	92°C
Heat Deflection Temperature	ISO 75 0.45Mpa	100°C
Saturated Water Absorption Rate	25°C, 55%RH	0.45%

■ Mechanical Properties

Subjects	Test Method	Data
Young's Modulus (X-Y)	ISO 527, GB/T 1040	2450±270MPa
Young's Modulus (Z)	ISO 527, GB/T 1040	2120±260MPa
Tensile Strength (X-Y)	ISO 527, GB/T 1040	37±3MPa
Tensile Strength (Z)	ISO 527, GB/T 1040	31±4MPa
Breaking Elongation Rate (X-Y)	ISO 527, GB/T 1040	9.2±1.4%
Breaking Elongation Rate (Z)	ISO 527, GB/T 1040	4.6±0.8%
Bending Modulus (X-Y)	ISO 178, GB/T 9341	1920±130MPa
Bending Modulus (Z)	ISO 178, GB/T 9341	1650±120MPa
Bending Strength (X-Y)	ISO 178, GB/T 9341	65±5MPa
Bending Strength (Z)	ISO 178, GB/T 9341	40±3MPa
Impact Strength (X-Y)	ISO 179, GB/T 1043	41.0±2.3KJ/m ² ; 19.6±1.8KJ/m ² (notched)
Impact Strength (Z)	ISO 179, GB/T 1043	4.9±0.6KJ/m ²

■ Applications

● Automobile rearview mirror



● Solar panel bracket

