(248) 836-2099
DASI 3D SOLUTIONS

ABSi

Production - Grade Thermoplastic

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ABSi™ is an ideal material for conceptual modeling, functional prototyping and direct digital manufacturing. Its strength is superiorto standard ABS, and the translucent nature of ABSi is beneficial for monitoring material flow and light transmission, most commonlyused for medical and automotive applications. When combined with a Fortus 3D Production System, ABSi gives you parts that arevisually unique, dimensionally accurate, durable and hold their shape over time.

MECHANICAL PROPERTIES[1]	TEST METHOD	ENGLISH	METRIC
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	5,400 psi	37 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	277,700 psi	1,920 MPa
Tensile Elongation (Type 1, 0.125", 0.2"/min)	ASTM D638	4.4%	4.4%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	8,980 psi	62 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	278,000 psi	1,920 MPa
IZOD Impact, notched (Method A, 23°C)	ASTM D256	1.8 ft-lb/in	96.4 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	3.6 ft-lb/in	191.1 J/m

THERMAL PROPERTIES[2]	TEST METHOD	ENGLISH	METRIC
Heat Deflection (HDT) @ 66 psi, 0.125" unannealed	ASTM D648	188°F	86°C
Heat Deflection (HDT) @ 264 psi, 0.125" unannealed	ASTM D648	163°F	73°C
Glass Transition Temperature (Tg)	DMA (SSYS)	240°F	116°C
Coefficient of Thermal Expansion	ASTM D696	6.7x10-06 in/in/°F	12.1x10-05 mm/mm/°C
Melting Point	----------	Not Applicable3	Not Applicable3

ELECTRICAL PROPERTIES[4]	TEST METHOD	VALUE RANGE
Volume Resistivity	ASTM D257	1.5x109 - 6.1x1010 ohm-cm
Dielectric Constant	ASTM D150-98	3.4 - 3.6
Dissipation Factor	ASTM D150-98	0.12 - 0.15
Dielectric Strength	ASTM D149-09, Method A	100 - 320 V/mil

The information presented are typical values intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions.

OTHER[2]	TEST METHOD	VALUE
Specific Gravity	ASTM D792	1.08
Rockwell Hardness	ASTM D785	R108
Flame Classification	UL 94	HB (0.059", 1.5 mm)

SYSTEM AVAILABILITY	LAYER THICKNESS CAPABILITY	SUPPORT STRUCTURE	AVAILABLE COLORS
Fortus 400mc™	0.013 inch (0.330 mm)	Soluble Supports	Translucent Natural
Fortus 900mc™	0.010 inch (0.254 mm)		Translucent Amber
	0.007 inch (0.178 mm)		Translucent Red
	0.005 inch (0.127 mm)		