



ABS-M30 is 25-70 percent stronger than standard Stratasys ABS and is an ideal material for conceptual prototyping, design verification, and direct digital manufacturing. ABS-M30 has greater tensile, impact, and flexural strength than standard ABS. Layer bonding is significantly stronger than that of standard ABS, for a more durable part. This results in more realistic functional tests and higher quality parts for end use. When combined with a Stratasys FDM mc™ series system, ABS-M30 gives you Real Parts™ that are stronger, smoother, and with better feature detail.

Mechanical Properties ¹	Test Method	Imperial	Metric
Tensile Strength (Type 1, 2"/min)	ASTM D638	5,200 psi	36 MPa
Tensile Modulus	ASTM D638	350,000 psi	2,413 MPa
Tensile Elongation	ASTM D638	4 %	4 %
Flexural Stress (Method 1, 0.05"/min)	ASTM D790	8,800 psi	61 MPa
Flexural Modulus	ASTM D790	336,000 psi	2,317 MPa
Flexural Elongation	ASTM D790	52 %	52 %
IZOD Impact, notched (Method A, 23°C)	ASTM D256	2.6 ft-lb/in	139 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	5.3 ft-lb/in	283 J/m

Thermal Properties ³	Test Method	Imperial	Metric
Heat Deflection (HDT) @ 66 psi, 0.125", unannealed	ASTM D648	204°F	96°C
Heat Deflection (HDT) @ 264 psi 0.125", unannealed	ASTM D648	180°F	82°C
Vicat Softening Temp. (Rate B/50)	ASTM D1525	210°F	99°C
Coefficient of Thermal Expansion (flow, -40F to 100F)	ASTM E831	4.9E-05 in/in/°F	8.82E-05 mm/mm/°C
Coefficient of Thermal Expansion (xflow, -40F to 100F)	ASTM E831	4.7E-05 in/in/°F	8.46E-05 mm/mm/°C
Glass Transition (Tg)	DSC (SSYS)	226°F	108°C
Melt Point	-----	Not Applicable ²	Not Applicable ²

Other ³	Test Method	Value
Specific Gravity	ASTM D792	1.04
Vertical Burning Test (Flame)	UL94	HB (0.06", 0.85mm)
Rockwell Hardness	ASTM D785	109.5
Dielectric S (kV/mm)	IEC 60112	28.0

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. Tested parts were built on FDM 400mc @ 0.10" (0.254 mm) slice. Product specifications are subject to change without notice.

¹ Build orientation is on side long edge. ² Due to amorphous nature, material does not display a melting point. ³ Literature value unless otherwise noted.

For more information about Stratasys systems and materials, contact your representative at +1 888.480.3548 or visit www.stratasys.com

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