

ABS-P400

A true industrial thermoplastic, ABS is widely used throughout industry. When combined with Dimension 3D printers it becomes the ideal solution to printing 3D models in an office environment.

| Mechanical Properties ¹ | Test Method | English | Metric |
|---|-------------|--------------|-----------|
| Tensile Strength (Type 1, 0.125", 0.2"/min) | ASTM D638 | 3,200 psi | 22 MPa |
| Tensile Modulus (Type 1, 0.125", 0.2"/min) | ASTM D638 | 236,000 psi | 1,627 MPa |
| Tensile Elongation (Type 1, 0.125", 0.2"/min) | ASTM D638 | 6% | 6% |
| Flexural Delamination | ASTM D790 | 2,000 psi | 14 MPa |
| Flexural Strength (Method 1, 0.05"/min) | ASTM D790 | 6,000 psi | 41 MPa |
| Flexural Modulus (Method 1, 0.05"/min) | ASTM D790 | 266,000 psi | 1,834 MPa |
| IZOD Impact, notched (Method A, 23°C) | ASTM D256 | 2.0 ft-lb/in | 106 J/m |

| Thermal Properties ² | Test Method | English | Metric |
|--|-------------|-----------------------------|-----------------------------|
| Heat Deflection (HDT) @ 66 psi | ASTM D648 | 195°F | 90°C |
| Heat Deflection (HDT) @ 264 psi | ASTM D648 | 169°F | 76°C |
| Glass Transition Temperature (T _g) | DMA (SSYS) | 219°F | 104°C |
| Melt Point | ----- | Not Applicable ³ | Not Applicable ³ |
| Coefficient of Thermal Expansion | ASTM E831 | 5.60 E-05 in/in°F | ----- |

| Other ² | Test Method | Value |
|---------------------|-------------|------------|
| Specific Gravity | ASTM D792 | 1.04 |
| Vertical Burn | UL94 | HB |
| Dielectric Strength | IEC 60112 | 32.0 kV/mm |
| UL File Number | ----- | E345258 |

| System Availability | Layer Thickness Capability | Support Structure | Available Colors |
|--|--|--|--|
| Dimension SST 768 Dimension BST 768 Dimension SST 1200 Dimension BST 1200 | 0.013 inch (0.330 mm) 0.010 inch (0.254 mm) | Soluble Supports (SST 768 and SST 1200) Breakaway Supports (BST 768 and BST 1200) | <input type="checkbox"/> White <input checked="" type="checkbox"/> Black <input type="checkbox"/> Steel Grey <input checked="" type="checkbox"/> Red <input checked="" type="checkbox"/> Blue <input checked="" type="checkbox"/> Green <input checked="" type="checkbox"/> Yellow |

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, color, etc. Actual values will vary with build conditions. Product specifications are subject to change without notice.

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

For more information about Dimension 3D Printers, call **888.480.3548** or visit www.dimensionprinting.com

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ISO 9001:2008 Certified

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