MakerBot real ABS is a real, production-grade ABS material formulation for creating strong and durable functional prototypes, manufacturing tools, and end-use parts. Unlike desktop ABS material formulations containing damaging modifiers and stabilizers that lead to warping and cracking, this real ABS formulation empowers engineers to achieve part properties close to injection molded parts with high dimensional accuracy, durability, and repeatability. Outpace your competition with better materials and better parts. Only with METHOD and MakerBot real ABS.

84°C
heat deflection
15°C hotter than typical modified ABS for desktop 3D printers

2400 MPA
tensile modulus
26% more rigid than typical modified ABS for desktop 3D printers

42 MPA
tensile strength
12% stronger than typical modified ABS for desktop 3D printers

±0.007 IN
(0.2 MM)
printed part dimensional accuracy with METHOD X
**MAKERBOT REAL ABS | Data Sheet**

Real, Production-Grade ABS for Manufacturing Applications

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**END-USE PARTS**

- Custom parts, low volume production, and components that require high geometric complexity

Applications include:
- Liquid containers
- Signage and graphic displays
- Enclosures for electrical equipment

**MANUFACTURING TOOLS**

- Create tools, jigs, and fixtures at lower cost, with faster turnaround, and without the need for expensive skilled labor

Applications include:
- Manufacturing tools and aids
- Robotic end effectors
- Product testing tools

**FUNCTIONAL PROTOTYPES**

- Get true fit and feel, test in real-world and beyond real-world scenarios, and expedite time to market in the same material as the final injection-molded part

Applications include:
- Consumer product prototypes
- Appliance assemblies
- Automotive parts

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ABS (acrylonitrile butadiene styrene) is one of the most common plastics used in injection-molding, found in many common products such as LEGO® blocks, computer keys, power-tool housings, and automotive parts.

<table>
<thead>
<tr>
<th>Test Parameter</th>
<th>Imperial</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Deflection @ 66psi (ASTM 648)</td>
<td>183°F</td>
<td>84°C</td>
</tr>
<tr>
<td>Flexural Strength (Method 1, 0.05&quot;/min)</td>
<td>9,427 psi</td>
<td>65 MPa</td>
</tr>
<tr>
<td>Flexural Modulus (Method 1, 0.05&quot;/min)</td>
<td>11,200 psi</td>
<td>77 MPa</td>
</tr>
<tr>
<td>Tensile Strength at yield (Type 1, 0.125&quot;, 0.2&quot;/min)</td>
<td>6,236 psi</td>
<td>43 MPa</td>
</tr>
<tr>
<td>Tensile Modulus (ISO 527)</td>
<td>348,090 psi</td>
<td>2,400 MPa</td>
</tr>
<tr>
<td>Strain at Yield - Elongation (%)</td>
<td>2.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Notched Impact Strength (ASTM D256)</td>
<td>0.48 ft-lb/in</td>
<td>26 J/m</td>
</tr>
<tr>
<td>Unnotched Impact Strength (ASTM D256)</td>
<td>31 ft-lb/in</td>
<td>1650 J/m</td>
</tr>
</tbody>
</table>

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**MakerBot METHOD**

MakerBot METHOD bridges the gap between industrial and desktop 3D printing. It was developed from the ground up leveraging industry-leading Stratasys® patents including a heated build chamber, precision dissolvable supports, and dry-sealed material bays. Engineers and designers use METHOD to create prototypes, jigs and fixtures, and end-use parts.

LEARN MORE AT MAKERBOT.COM/METHOD

Specs are based on internal testing of injection molded specimens of METHOD X ABS compared to ABS from a leading desktop 3D printer competitor. Tensile testing was performed according to ASTM D638 and HDT testing according to ASTM D648. Based on internal testing of injection molded specimens of METHOD X ABS compared to ABS from a leading desktop 3D printer competitor.