

Key Features

- High rigidity and dimensional stability
- Resistance to impact and scratches
- Low melting point
- High weldability
- High strength-to-weight ratio

Common Applications

- Injection molding
- Aerospace interior
- Automotive parts
- Enclosures
- Covers
- Structural Components
- Machined Prototypes

Material Description

ABS, or Acrylonitrile Butadiene Styrene, is a common thermoplastic polymer known for its toughness, impact resistance, and ease of processing. It is widely used in various industries for its versatility and cost-effectiveness. ABS has good mechanical properties and can be easily molded, extruded, and thermoformed, making it suitable for a wide range of applications, including automotive components, household appliances, toys, and consumer electronics. It is also known for its ability to be easily painted and glued, as well as its resistance to chemicals and abrasion. ABS is available in various grades and colors to meet specific application requirements.

Mechanical Properties

Ultimate Tensile Strength	41.0 MPa
Tensile Yield Strength	44.8 MPa
Hardness	Rockwell R108
Elongation at Break	28.5%

Physical Properties

Density	0.039 lb/in ³ (1.07 g/cm ³)
Thermal Conductivity	0.162W/m.K
Modulus of Elasticity	2.35 GPa
Melting Point	234 °C

Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

InstaVoxel™ – On-Demand Manufacturing Expert

InstaVoxel's quality control system is ISO-9001 certified, and all our partners hold relevant certifications.



All information in our data sheet is based on approximate testing and provided to the best of our knowledge and belief. It is presented without any contractual obligations and does not constitute a guarantee of properties, processing, or application possibilities in specific cases. Our warranties and liabilities are defined solely by our terms of trade.