

Key Features

- Abrasion resistant
- Chemical resistant
- Impact resistant
- Moisture resistant
- Stress crack resistant
- Excellent dielectric properties
- Able to retain stiffness and flexibility
- High tensile

Common Applications

- Food handling
- Aircraft
- Aerospace
- Defense
- Alternative energy
- Medical application

Material Description

Polypropylene (PP) is a versatile thermoplastic known for its excellent chemical resistance, low density, and high stiffness. It is widely used in various industries due to its versatile properties and cost-effectiveness. PP offers good impact resistance and toughness, making it suitable for a wide range of applications. Its chemical resistance makes it ideal for use in environments with exposure to acids, bases, and solvents. PP is also lightweight and moisture-resistant, making it suitable for outdoor applications. Additionally, PP can be easily molded, extruded, and welded, allowing for the production of a wide range of products.

Mechanical Properties

Ultimate Tensile Strength	29.2 MPa
Tensile Yield Strength	31.5 MPa
Hardness	Rockwell R94.9
Elongation at Break	159%

Physical Properties

Density	0.034 lb/in ³ (0.931 g/cm ³)
Thermal Conductivity	0.11 – 0.17W/m.K
Modulus of Elasticity	1.69 GPa
Melting Point	160 °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

859 Willard Street Suite 400, Quincy MA 02169 USA
+1 (617) 302-1629 | info@instavoxel.com
www.instavoxel.com



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



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