

Features

- Heat Stabilised
- Dimensionally stable
- Hardness, strength, and ductility
- Low moisture absorption
- Hydrolysis and chemical resistance
- ISO 10993, FDA & USP VI compliant
- Steam Sterilizable in Autoclave
- Easy to machine
- Laser markable
- Biocompatibility
- Designed for Orthopedic applications such as heads and cups for hip implants & knee provisional trials

RS PRO Polypropylene HS Rod, 25.4mm Diameter, 1219mm Length, Black

RS Stock No.: 0717552



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

RS PRO Polypropylene HS Rod – 25.4mm Diameter, 1219mm Length, Black

This RS PRO engineering plastic rod is manufactured from heat-stabilised polypropylene (HS), designed for high-performance applications in medical, life sciences, and industrial environments. Its excellent chemical resistance, low moisture absorption, and ability to withstand repeated sterilisation make it ideal for precision-machined components in regulated sectors.

Certifications and Compliance:

- *Compliant with ISO 10993 for biocompatibility*
- *FDA compliant for food and medical contact*
- *Meets USP Class VI standards for pharmaceutical applications*
- *Fully lot traceable for quality assurance*

Applications:

- *Medical device components*
- *Diagnostic and laboratory equipment*
- *Life science instrumentation*
- *Cleanroom and sterile environment parts*
- *Custom-machined parts requiring repeated sterilisation*

Sterilisation Compatibility:

- *Steam autoclaving*
- *Ethylene oxide (EtO) gas*
- *Cold sterilisation methods*

General Specifications

Material	Heat-stabilised polypropylene (HS grade)
Form	Solid extruded rod
Application	Medical and Life Science
Density	0.90 g/cm ³
Water Absorption	0.025%
Colour	Black

Polypropylene Resin Rod

Mechanical Specifications

Length	1219mm
Diameter	25.4mm
Tensile Strength @ Break	3.9 kpsi (27 MPa)
Tensile Strength @ Yield	5.0 kpsi (35 MPa)
Tensile Elongation @ Break	20–60%
Flexural Modulus	313 kpsi (2,158 MPa)
Flexural Strength (5% strain	9.2 kpsi (64 MPa)
Impact Resistance (Izod Notched)	0.90 ft-lb/in (48 J/m)
Hardness (R Scale)	Rockwell R Scale – 92
Heat Deflection Temperature (HDT)	@ 66 psi: 302°F (150°C) @ 264 psi: 160°F (71°C)

Approvals

Compliance/Certifications	ISO 10993, FDA & USP VI Compliant
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Similar Products

Stock No.	Form	Colour	Diameter (mm)	Width (mm)
0717552	Solid extruded rod	Black	25.4	1219
0717553	Solid extruded rod	Blue	25.4	1219
0717554	Solid extruded rod	Green	25.4	1219
0717555	Solid extruded rod	Violet	25.4	1219
0717557	Solid extruded rod	Yellow	25.4	1219