

Polypropylene

Selective Laser Sintering (SLS)

Tough, fatigue-resistant production-grade material

Ricoh's versatile translucent off-white material is one of the most commonly used polymers in the manufacturing industry, with comparable properties to injection moulded Polypropylene (PP). Durable, fatigue-resistant and lightweight, PP is uniquely representative of the end part and therefore offers precise form, fit and functional testing.

Our unique PP also boasts chemical resistance, with WRAS (Water Regulation Advisory Scheme) approval and complete recyclability. 3D-printed PP has extremely high elongation at break and is therefore perfectly suited to applications including functional prototypes for snap-fit, automotive assemblies or living hinges, packaging and consumer goods.

Why choose Polypropylene?

- Properties comparable to injection moulded Polypropylene
- Very high elongation at break
- Good impact resistance
- WRAS approved material
- Lightweight
- Watertight and airtight without post-processing
- Excellent chemical resistance
- Minimal moisture absorption
- Parts can be joined and smoothed
- Parts can be dyed

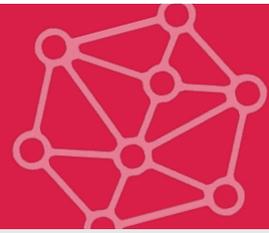
Applications

- Functional prototypes and end-use parts
- Car bumpers, vehicle dashboards
- Air ducts
- Packaging and consumers goods
- Housing components
- Healthcare and orthopaedic products
- Appropriate for low-mid volume rapid manufacturing



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General properties	Value (XY Axis)	Test method
Colour	White/Translucent	Visual
Part density	0.84 g/cm ³	ISO 1183

Thermal properties	Value (XY Axis)	Test method
Melting temperature	125° C	ISO 11357-3 (10°C/min)
Heat deflection temperature (0.45Mpa)	71° C	ISO 75B
Heat deflection temperature (1.8Mpa)	52° C	ISO 75A

Mechanical properties	Value (XY Axis)	Test method
Tensile strength (ultimate)	21.4 MPa	ISO 527
Tensile modulus	907 MPa	ISO 527
Elongation at break	529%	ISO 527
Flexural stress (ultimate)	22.8 MPa	ISO 178
Flexural strain	14.8%	ISO 178
Flexural modulus	698 MPa	ISO 178
Impact strength – Charpy (notched)	5.4 kJ/m ²	ISO 179-A
Impact strength – Charpy (un-notched)	73 kJ/m ²	ISO 179-A

Get a quote for your parts at rapidfab.ricoh-europe.com
Have a question? Call our friendly team on
+44 (0) 800 304 7196

Specifications are subject to change without notice.

The technical data indicated above is an average value of the test result of a part created under proper management and appropriate conditions.
The value is for reference and is not guaranteed.