

Public printing recommendation

Prusa3D Prusament PP CF Black

MaterialID MAT0036



3DPiceland Labs
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WORKFLOW-RELIABILITY - Bug Fixes and Workflow
Reliability
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Guidance boundary: values below are shared base-material guidance resolved only through the canonical BaseMaterialId link. They are not manufacturer-, spool- or printer-specific validated settings. Missing fields remain Not recorded.

Overall 42/100	Engineering axes 6/5	Public rank 178 / 234	MSRP USD/kg 109.54
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Engineering profile



Recommended applications

- Repeatable print jobs and production-style batches
- Cosmetic parts, concept models or low-load prototypes
- Avoid high tensile load applications
- Avoid high impact components

Measured strengths

- Consistency: 87/100. Repeatability is one of the stronger signals in this material profile.

Limitations

- Tensile: 22/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 29/100. Avoid high impact or shock-loaded components without additional validation.
- Stiffness: 46/100. Expect less shape stability than the stronger materials in the same family.
- Layer adhesion: 28/100. Z-axis performance should be treated with caution.

Engineering trade-offs

- Good repeatability does not compensate for low tensile capability in load-bearing designs.
- The report should be read as a suitability warning rather than a general-purpose recommendation.

Base-material printing guidance

Guidance	Minimum	Recommended	Maximum	Unit
Nozzle temperature	270	270	280	°C
Bed temperature	85	95	100	°C
Print speed	10	45	45	mm/s
Cooling	0	0	0	%
Guidance	Value			Unit
Cooling guidance	Off			
Drying temperature	70			°C
Drying time	6			hours
Enclosure	Required			
Printer / G-code reference	PrusaCoreOneL			
Slicer profile reference	Prusament PP			

Print workflow checks

- Confirm nozzle temperature, bed temperature, speed, cooling and drying requirements from the manufacturer profile or spool label.
- Print a small validation part before committing to a long, costly or safety-relevant print.
- Orient the part so the governing load does not rely on an unverified or weak engineering axis.

- Reinforced filament: confirm an abrasion-resistant nozzle and manufacturer drying/storage requirements.
- Layer-adhesion evidence is weak; avoid critical Z-axis loading without additional validation.

Decision guidance

- Use this material mainly for low-load, visual or experimental parts.
- Review the listed alternatives if the application needs stronger overall performance.
- Do not choose it as a tensile-strength benchmark material.
- Avoid selecting it for impact-focused testing or shock-loaded designs.

Stronger same-family alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0194	Eryone Standard White PP White	Eryone	49/100	15/100	41/100
MAT0037	Prusa3D Prusament Natural PP GF White	Prusa3D	48/100	36/100	33/100

Confirm exact settings against the manufacturer profile, spool label and actual printer/material combination. Results do not replace application-specific validation.

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