

Public printing recommendation

Siraya Tech Fiberheart Black TPU GF Black

MaterialID MAT0200



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.

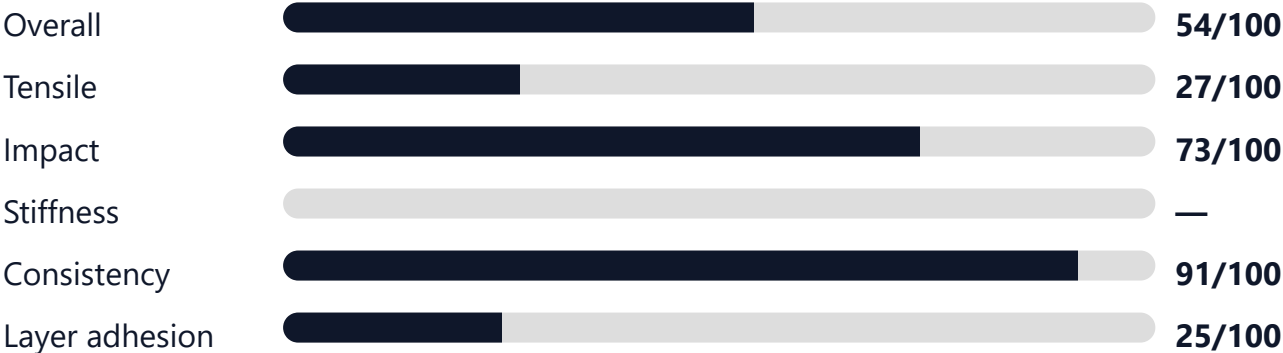
Overall
54/100

Engineering axes
5/5

Public rank
40 / 234

MSRP USD/kg
35.19

Engineering profile



Recommended applications

- Impact-aware parts where toughness matters
- Repeatable print jobs and production-style batches
- Cosmetic parts, concept models or low-load prototypes
- Avoid high tensile load applications

Measured strengths

- Consistency: 91/100. Repeatability is one of the stronger signals in this material profile.
- Impact: 73/100. Impact behavior is competitive against the material-family context.

Limitations

- Tensile: 27/100. Avoid using this as the primary choice for tensile-loaded parts.
- Layer adhesion: 25/100. Z-axis performance should be treated with caution.

Engineering trade-offs

- Good repeatability does not compensate for low tensile capability in load-bearing designs.

Base-material printing guidance

Guidance	Minimum	Recommended	Maximum	Unit
Nozzle temperature	220	225	260	°C
Bed temperature	65	65	65	°C
Print speed	11	30	30	mm/s
Cooling	65	65	65	%
Guidance	Value			Unit
Cooling guidance	High			
Drying temperature	65			°C
Drying time	8			hours
Enclosure	Not required			
Printer / G-code reference	PrusaCoreOneL			
Slicer profile reference	Prusament TPU 95A			

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.
- Flexible family: validate extrusion path, retraction and speed conservatively on the actual printer.
- Layer-adhesion evidence is weak; avoid critical Z-axis loading without additional validation.

Decision guidance

- Use this material for moderate requirements after checking the weakest axis.
- Do not choose it as a tensile-strength benchmark material.

Stronger same-family alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
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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