Public printing recommendation

BambuLab Standard Glow Blue PLA Glow Blue

MaterialID MAT0172

3DPIceland Labs

Generated with 3DPIceland Engineering Platform v60.0.6

WORKFLOW-RELIABILITY - Bug Fixes and Workflow Reliability

2026-08-25 19:05:46

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	Engineering axes	Public rank	MSRP USD/kg
52/100	**6/5**	**60 / 234**	**47.92**

Engineering profile

Recommended applications

- Rigid brackets, fixtures and shape-stable prototypes
- 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

- Layer adhesion: 43/100. Z-axis bonding is better than the material-family context.
- Consistency: 86/100. Repeatability is one of the stronger signals in this material profile.
- Stiffness: 80/100. Stiffness is a relative advantage in this comparison group.

Limitations

- Tensile: 32/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 22/100. Avoid high impact or shock-loaded components without additional validation.

Engineering trade-offs

- Good repeatability does not compensate for low tensile capability in load-bearing designs.
- Stiffness is useful for shape stability, but impact tolerance is a separate limitation.

Base-material printing guidance

Guidance	Minimum	Recommended	Maximum	Unit
Nozzle temperature	195	230	230	°C
Bed temperature	60	60	70	°C
Print speed	55	165	165	mm/s
Cooling	20	80	85	%

Guidance	Value	Unit
Cooling guidance	High	
Drying temperature	50	°C
Drying time	5	hours
Enclosure	Not required	
Printer / G-code reference	PrusaCoreOneL	
Slicer profile reference	Prusament PLA	

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.

Decision guidance

- Use this material for moderate requirements after checking the weakest axis.
- 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
MAT0069	ProtoPasta HTPLA Blood of My Enemies PLA Red	ProtoPasta	100/100	—	—
MAT0079	Polymaker PolyLight PLA Pro Black	Polymaker	65/100	35/100	52/100
MAT0109	Polymaker PolyMax PLA Black	Polymaker	64/100	32/100	62/100

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

Testing methodology · Download PDF

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