Public engineering report

Prima Creator PrimaSelect Lake Blue PETG Blue

Material Engineering Report
MaterialID MAT0050

3DP Iceland Labs

3DPIceland Engineering Platform
3DPIceland Labs
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WORKFLOW-RELIABILITY - Bug Fixes and Workflow Reliability
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Public-data contract: This static report contains only allowlisted material identity, public links, canonical MSRP and existing Verified Material Summary / governed score outputs. It excludes raw specimen rows and non-public operational data.

TEST COVERAGE	ENGINEERING AXES	PUBLIC MSRP
Complete	**6/6**	**$20.78 USD/kg**

Material identity

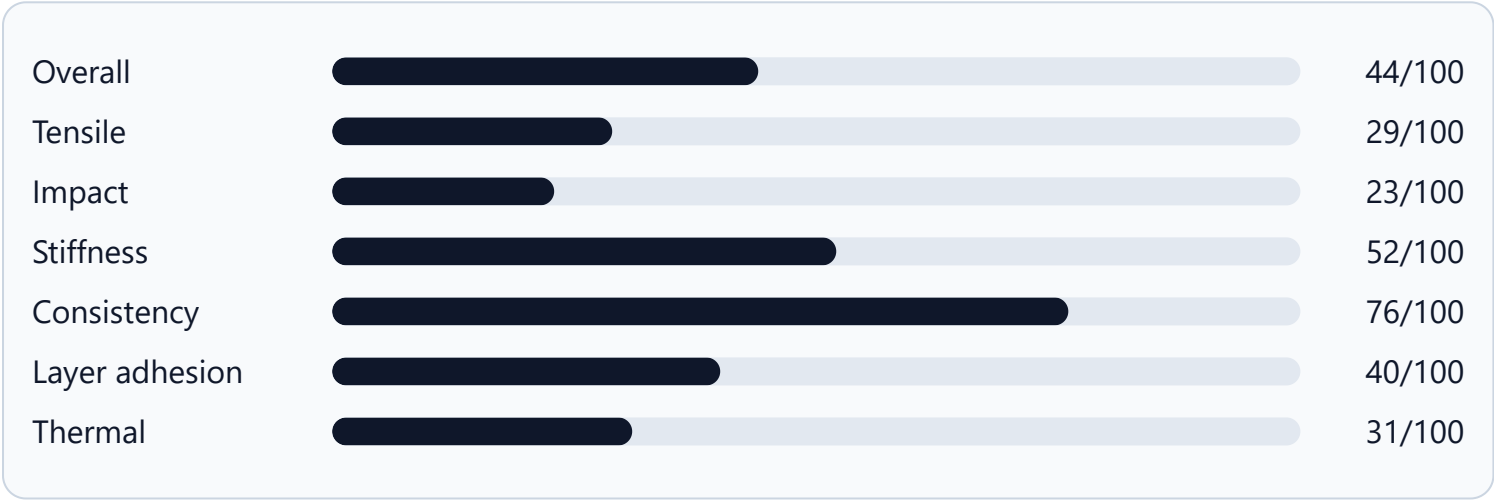
MaterialID	MAT0050
Material	Prima Creator PrimaSelect Lake Blue PETG Blue
Manufacturer	Prima Creator
Product line	PrimaSelect
Base material	PETG
Category	Standard
Variant / finish	—
Reinforcement	—
Color	Blue

Governed engineering profile

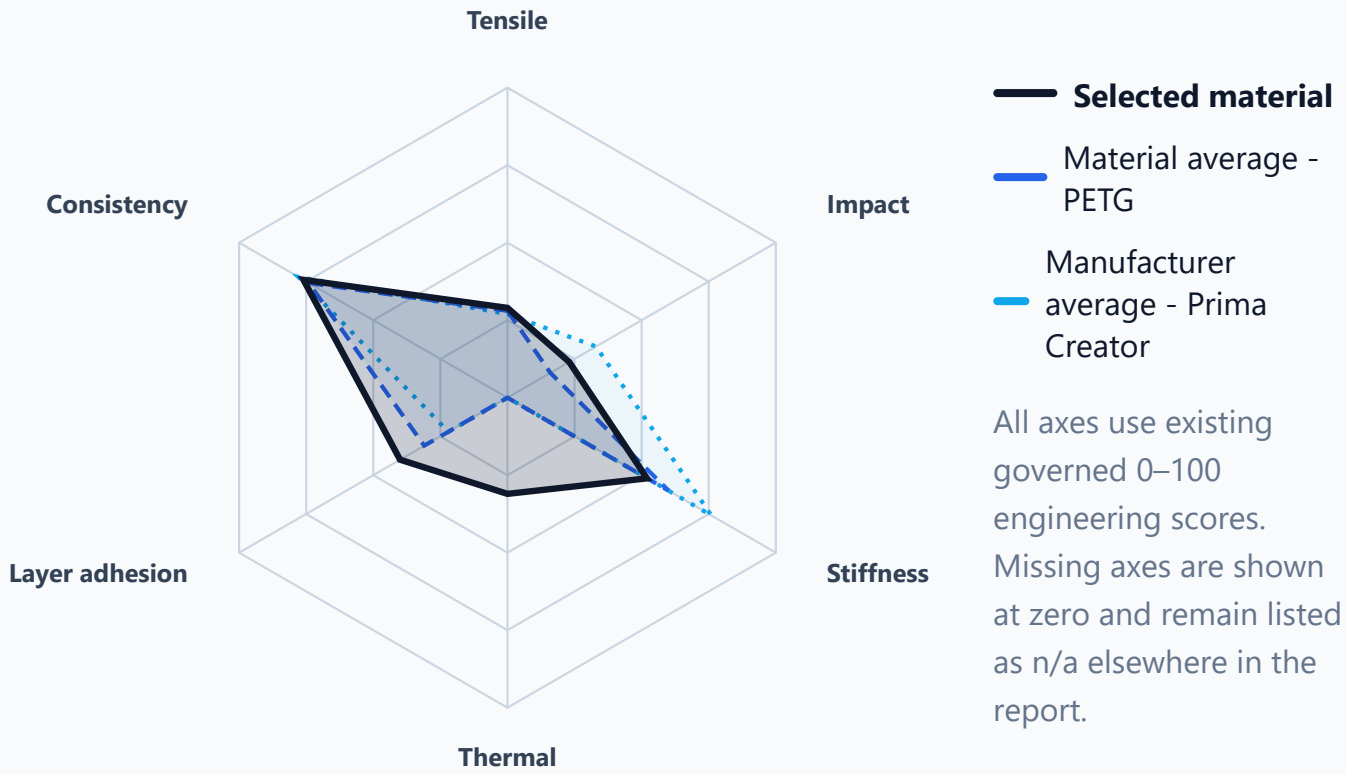
Overall	44/100

Tensile	29/100
Impact	23/100
Stiffness	52/100
Consistency	76/100
Layer adhesion	40/100
Thermal	31/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

62 °C · score 31/100 · method 3dp-thermal-deflection-fixture-v1
Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland method; not ASTM D648, ISO 75, specimen temperature, certified HDT or a manufacturer limit.

Material and manufacturer context

Metric	Selected material	Material average	Manufacturer average
Overall	44/100	42/100	47/100
Tensile	29/100	28/100	27/100
Impact	23/100	16/100	33/100
Stiffness	52/100	60/100	76/100
Consistency	76/100	74/100	78/100
Layer adhesion	40/100	31/100	22/100
Thermal	31/100	—	—

Verified measurement results

Existing Verified Material Summary outputs. The public renderer does not read raw specimen rows or recalculate these values.

Measurement	Average	Std. deviation	CV	Samples	Confidence
Tensile upright	13.12 MPa	5.784 MPa	44.1%	10	10/10
Tensile flat	33.1 MPa	5.555 MPa	16.8%	10	10/10
Impact upright	163.919 kJ/m²	25.549 kJ/m²	15.6%	10	10/10
Impact flat	304.658 kJ/m²	57.432 kJ/m²	18.9%	10	10/10
Stiffness modulus	1563.663 MPa	—	—	—	—
Stiffness deflection	3.47 mm	—	—	—	—

Measurement provenance

Canonical per-module measured dates from SQLite, shown in unambiguous ISO format. Missing dates are not inferred.

Module	Measured date
Tensile	Not recorded
Impact	Not recorded
Stiffness	Not recorded
Thermal	Not recorded

Engineering interpretation

Summary: Prima Creator PrimaSelect Lake Blue PETG Blue has a specialized or limited engineering profile. It is above its material-family average by 1,9 points and below its manufacturer average by 3,3 points. Its strongest measured axis is Consistency, while the weakest axis is Impact.

Data-driven review: Prima Creator PrimaSelect Lake Blue PETG Blue is best understood as a repeatable material for cosmetic, concept and low-load prototype work. Compared with the current verified dataset, it ranks better than 33% overall, is roughly aligned with the material-family average, and is below the manufacturer average by 3,3 points. Its strongest engineering signal is Consistency, while Impact is the main limitation to consider before using it for demanding applications.

BEST FEATURE
Consistency

MAIN LIMITATION
Impact

DATASET POSITION
Better than 33%
158 / 234

Strengths

- Layer adhesion: 40/100. Z-axis bonding is better than the material-family context.
- Consistency: 76/100. Repeatability is one of the stronger signals in this material profile.
- Impact: 23/100. Impact behavior is competitive against the material-family context.

Limitations

- Tensile: 29/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 23/100. Avoid high impact or shock-loaded components without additional validation.
- Layer adhesion: 40/100. 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.

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

Metric rankings and percentiles

Metric	Score	Rank	Percentile
Overall	44/100	158 / 234	Better than 33%

Metric	Score	Rank	Percentile
Tensile	29/100	113 / 226	Better than 50%
Impact	23/100	104 / 226	Better than 54%
Stiffness	52/100	199 / 223	Better than 11%
Consistency	76/100	149 / 231	Better than 36%
Layer adhesion	40/100	49 / 226	Better than 79%
Thermal	31/100	91 / 209	Better than 57%

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.

Better alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0236	Yasin Standard Black PETG CF Black	Yasin	50/100	30/100	20/100
MAT0198	Siraya Tech Fiberheart Black PETG Pro CF Black	Siraya Tech	49/100	33/100	19/100
MAT0060	ColorFabb XT PETG Pink	ColorFabb	48/100	—	—

Peer context

Highest-scoring same-base-material peers from the current governed dataset. This context is descriptive and is not recalculated by the public renderer.

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0236	Yasin Standard Black PETG CF Black	Yasin	50/100	30/100	20/100
MAT0198	Siraya Tech Fiberheart Black PETG Pro CF Black	Siraya Tech	49/100	33/100	19/100

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0060	ColorFabb XT PETG Pink	ColorFabb	48/100	—	—
MAT0062	IC3D Standard PETG Green-Yellow	IC3D	48/100	26/100	—
MAT0165	Winkle Standard Ash Gray PETG Gray	Winkle	46/100	30/100	14/100
MAT0225	Spectrum Premium Iceland Blue PETG Blue	Spectrum	46/100	33/100	17/100
MAT0063	IC3D Standard PETG Yellow	IC3D	46/100	26/100	—
MAT0235	Yasin Standard Black PETG GF Black	Yasin	45/100	27/100	21/100

Public links

Manufacturer website Download PDF

Methodology and limitations

Results are comparative 3DPIceland measurements from home-built test equipment. Thermal is a nearby BlueDOT probe-indicated fixture temperature, not ASTM D648, ISO 75 or specimen temperature. Missing evidence remains n/a. Scores and test results are not recalculated by this publishing layer and do not replace certified manufacturer datasheets or accredited laboratory testing.

- Testing methodology
- Engineering methodology whitepaper