

Eryone Standard Blue PETG Blue

Material Engineering Report
MaterialID MAT0215

3DPiceland Engineering Platform
3DPiceland Labs

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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

Complete

ENGINEERING AXES

6/6

PUBLIC MSRP

\$13.00 USD/kg

Material identity

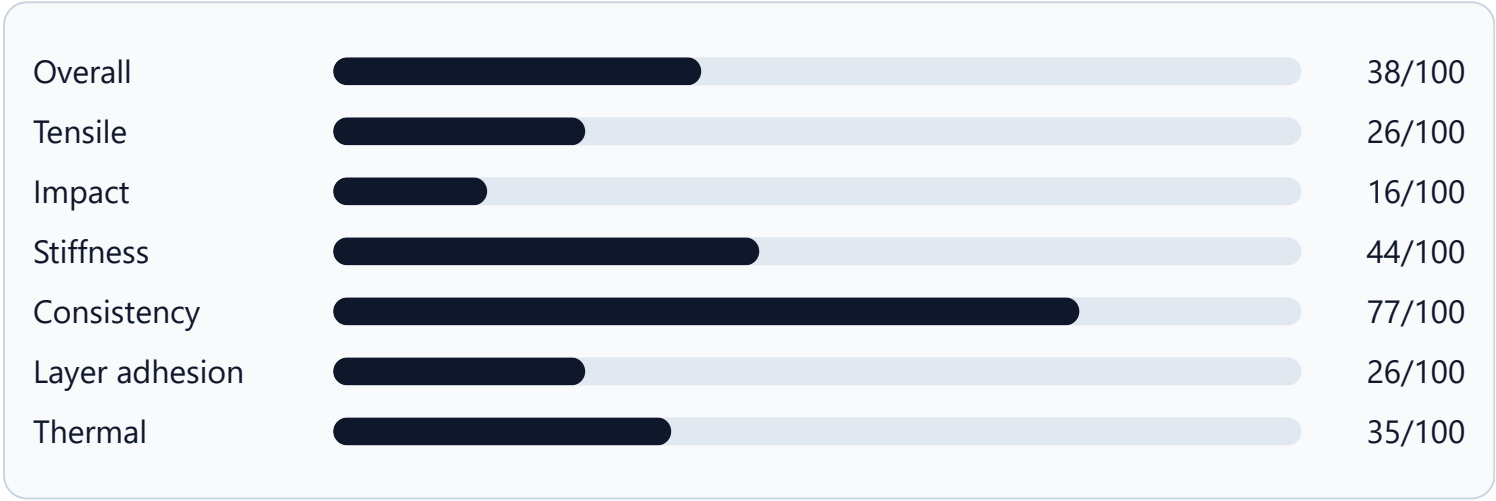
MaterialID	MAT0215
Material	Eryone Standard Blue PETG Blue
Manufacturer	Eryone
Product line	Standard
Base material	PETG
Category	Standard
Variant / finish	—
Reinforcement	—
Color	Blue

Governed engineering profile

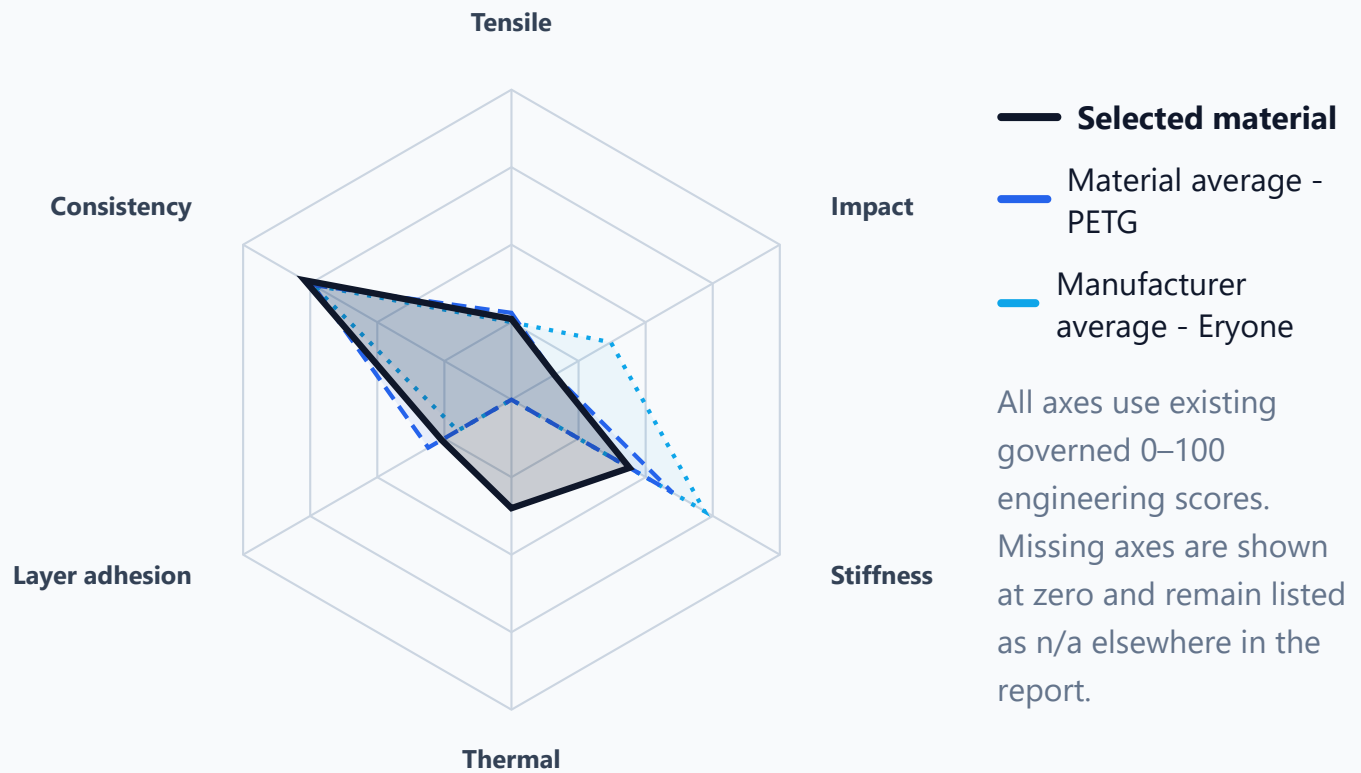
Overall	38/100
Tensile	26/100

Impact	16/100
Stiffness	44/100
Consistency	77/100
Layer adhesion	26/100
Thermal	35/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

69 °C · score 35/100 · method 3dp-thermal-deflection-fixture-v1

Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPlceland 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	38/100	42/100	46/100
Tensile	26/100	28/100	25/100
Impact	16/100	16/100	37/100
Stiffness	44/100	60/100	72/100
Consistency	77/100	74/100	74/100
Layer adhesion	26/100	31/100	20/100
Thermal	35/100	—	—

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	8.506 MPa	4.296 MPa	50.5%	10	10/10
Tensile flat	32.469 MPa	4.623 MPa	14.2%	10	10/10
Impact upright	115.232 kJ/m ²	13.343 kJ/m ²	11.6%	10	10/10
Impact flat	205.928 kJ/m ²	30.855 kJ/m ²	15%	10	10/10
Stiffness modulus	1308.597 MPa	—	—	—	—
Stiffness deflection	4.147 mm	—	—	—	—

Measurement provenance

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

Module	Measured date
Tensile	2026-08-01
Impact	2026-08-01
Stiffness	2026-07-31
Thermal	Not recorded

Engineering interpretation

Summary: Eryone Standard Blue PETG Blue has a specialized or limited engineering profile. It is below its material-family average by 4,4 points and below its manufacturer average by 8,6 points. Its strongest measured axis is Consistency, while the weakest axis is Impact.

Data-driven review: Eryone Standard 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 8% overall, is below the material-family average by 4,4 points, and is below the manufacturer average by 8,6 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 8%
217 / 234

Strengths

- Consistency: 77/100. Repeatability is one of the stronger signals in this material profile.

Limitations

- Tensile: 26/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 16/100. Avoid high impact or shock-loaded components without additional validation.
- Stiffness: 44/100. Expect less shape stability than the stronger materials in the same family.
- Layer adhesion: 26/100. 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	38/100	217 / 234	Better than 8%
Tensile	26/100	145 / 226	Better than 36%
Impact	16/100	175 / 226	Better than 23%
Stiffness	44/100	210 / 223	Better than 6%
Consistency	77/100	135 / 231	Better than 42%
Layer adhesion	26/100	99 / 226	Better than 57%
Thermal	35/100	67 / 209	Better than 68%

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

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
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	—	—
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](#)