

Yasin Standard Black PC Plus Black

Material Engineering Report
MaterialID MAT0034

3DPiceland Engineering Platform
3DPiceland Labs

Generated with 3DPiceland Engineering Platform v60.0.6 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

Complete

ENGINEERING AXES

6/6

PUBLIC MSRP

\$31.52 USD/kg

Material identity

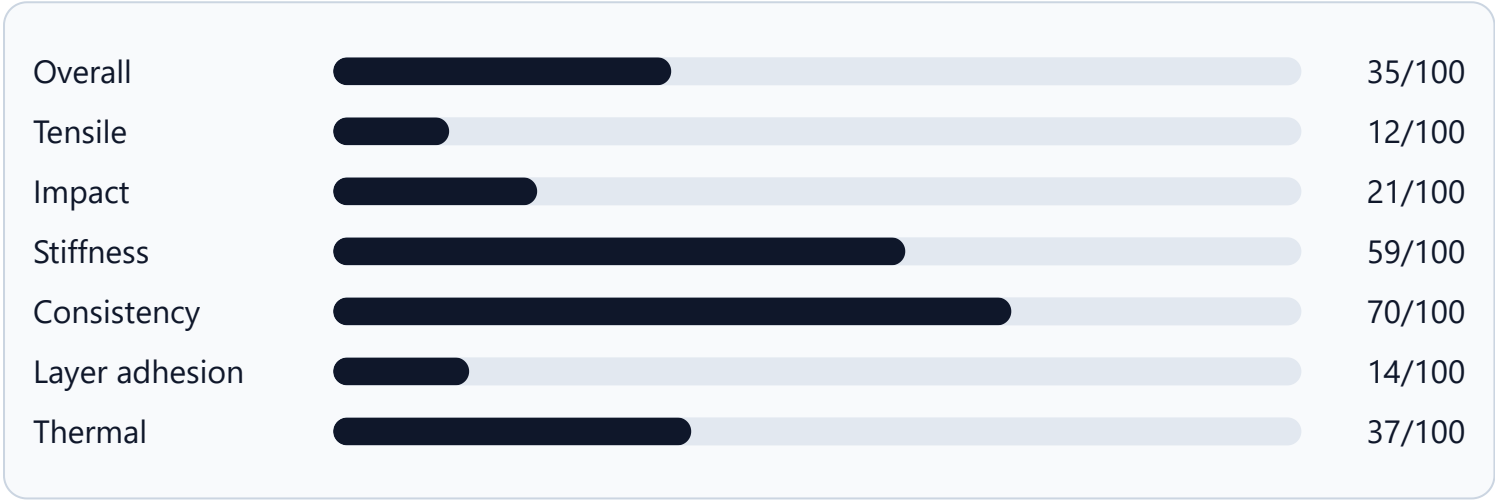
MaterialID	MAT0034
Material	Yasin Standard Black PC Plus Black
Manufacturer	Yasin
Product line	Standard
Base material	PC
Category	Engineering
Variant / finish	Plus
Reinforcement	—
Color	Black

Governed engineering profile

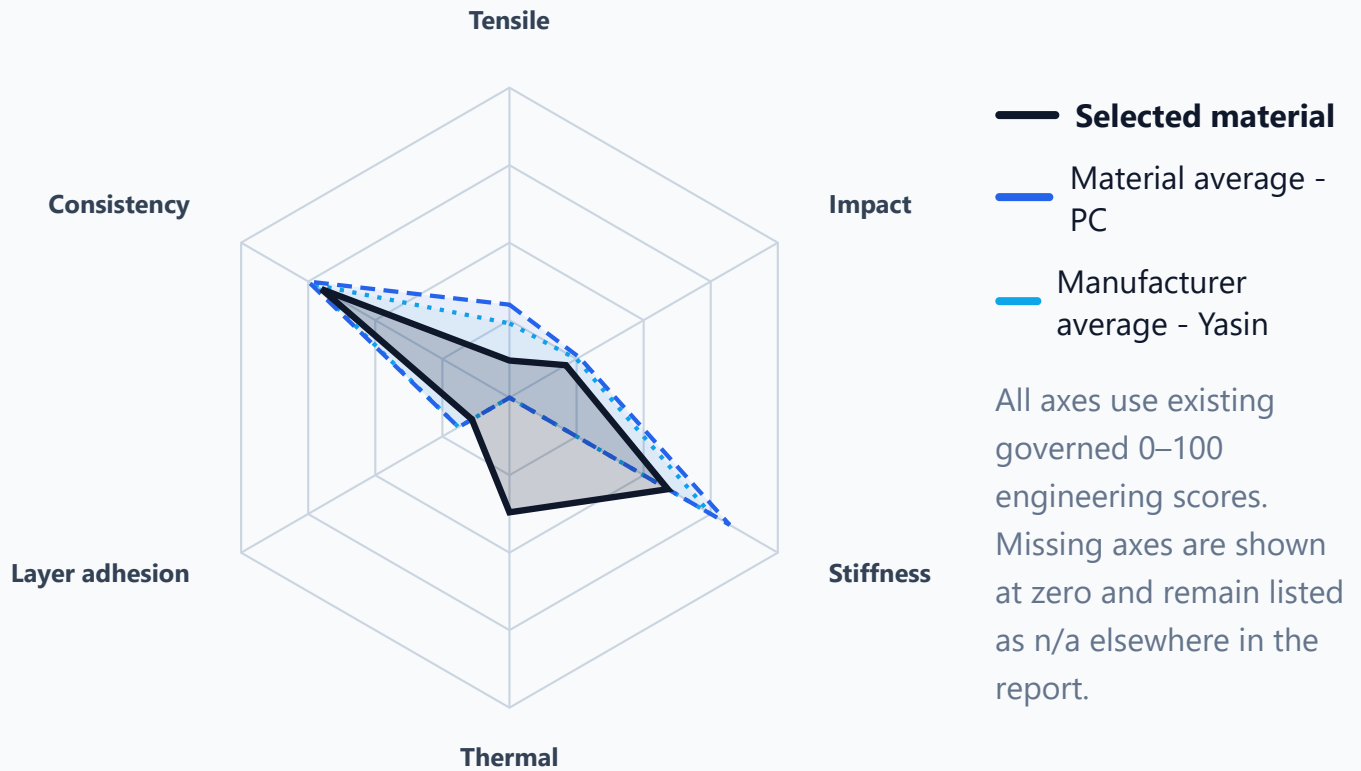
Overall	35/100
Tensile	12/100

Impact	21/100
Stiffness	59/100
Consistency	70/100
Layer adhesion	14/100
Thermal	37/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

73 °C · score 37/100 · 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	35/100	46/100	43/100
Tensile	12/100	30/100	24/100
Impact	21/100	26/100	25/100
Stiffness	59/100	82/100	75/100
Consistency	70/100	75/100	73/100
Layer adhesion	14/100	19/100	19/100
Thermal	37/100	—	—

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	2.395 MPa	1.198 MPa	50%	7	7/10
Tensile flat	17.196 MPa	5.452 MPa	31.7%	10	10/10
Impact upright	116.96 kJ/m ²	23.561 kJ/m ²	20.1%	10	10/10
Impact flat	304.671 kJ/m ²	42.494 kJ/m ²	13.9%	10	10/10
Stiffness modulus	1782.727 MPa	—	—	—	—
Stiffness deflection	3.044 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: Yasin Standard Black PC Plus Black has a specialized or limited engineering profile. It is below its material-family average by 11,1 points and below its manufacturer average by 7,7 points. Its strongest measured axis is Consistency, while the weakest axis is Tensile.

Data-driven review: Yasin Standard Black PC Plus Black 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 3% overall, is below the material-family average by 11,1 points, and is below the manufacturer average by 7,7 points. Its strongest engineering signal is Consistency, while Tensile is the main limitation to consider before using it for demanding applications.

BEST FEATURE

Consistency

MAIN LIMITATION

Tensile

DATASET POSITION

Better than 3%

229 / 234

Strengths

- Best available signal: Consistency at 70/100.

Limitations

- Tensile: 12/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 21/100. Avoid high impact or shock-loaded components without additional validation.
- Stiffness: 59/100. Expect less shape stability than the stronger materials in the same family.
- Layer adhesion: 14/100. 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

- 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	35/100	229 / 234	Better than 3%
Tensile	12/100	221 / 226	Better than 3%
Impact	21/100	123 / 226	Better than 46%
Stiffness	59/100	186 / 223	Better than 17%
Consistency	70/100	200 / 231	Better than 14%
Layer adhesion	14/100	175 / 226	Better than 23%
Thermal	37/100	64 / 209	Better than 70%

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
MAT0033	Prusa3D Prusament PC Blend PC Black	Prusa3D	56/100	39/100	46/100
MAT0029	Prusa3D Prusament PC Blend PC CF Black	Prusa3D	55/100	35/100	32/100
MAT0032	Prima Creator PrimaSelect PC Black	Prima Creator	46/100	26/100	21/100

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
MAT0033	Prusa3D Prusament PC Blend PC Black	Prusa3D	56/100	39/100	46/100
MAT0029	Prusa3D Prusament PC Blend PC CF Black	Prusa3D	55/100	35/100	32/100

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0032	Prima Creator PrimaSelect PC Black	Prima Creator	46/100	26/100	21/100
MAT0028	Prima Creator PrimaSelect PC CF Black	Prima Creator	45/100	38/100	21/100
MAT0168	BambuLab Basic PC White	BambuLab	42/100	30/100	13/100

Public links

[Manufacturer website](#) [Download PDF](#)

Methodology and limitations

Results are comparative 3DPlceland 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](#)