

Yasin Standard White HIPS White

Material Engineering Report
MaterialID MAT0240

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

\$26.88 USD/kg

Material identity

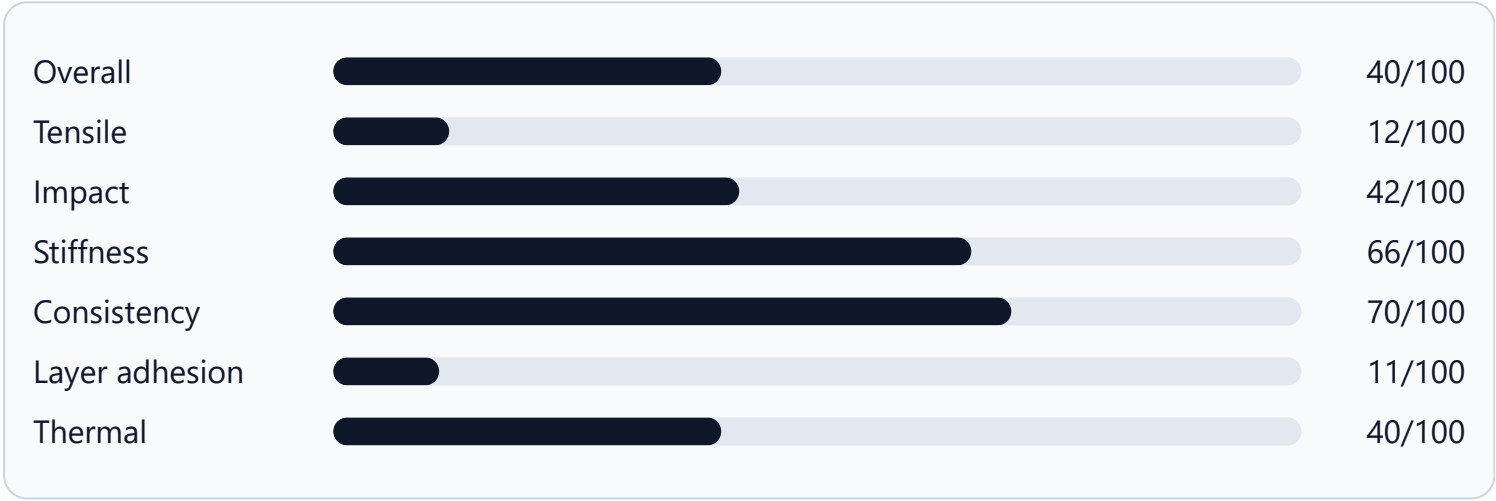
MaterialID	MAT0240
Material	Yasin Standard White HIPS White
Manufacturer	Yasin
Product line	Standard
Base material	HIPS
Category	Engineering
Variant / finish	—
Reinforcement	—
Color	White

Governed engineering profile

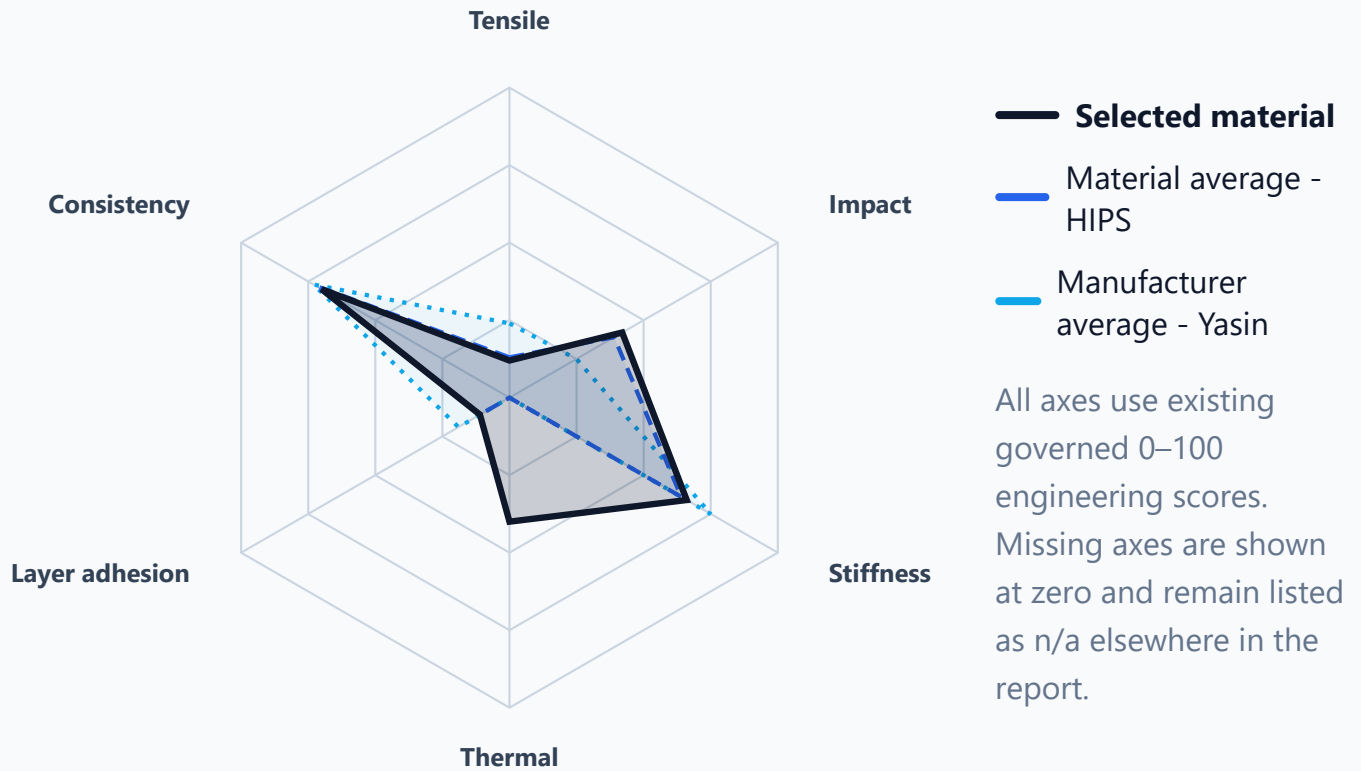
Overall	40/100
Tensile	12/100

Impact	42/100
Stiffness	66/100
Consistency	70/100
Layer adhesion	11/100
Thermal	40/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

80 °C · score 40/100 · 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	40/100	40/100	43/100
Tensile	12/100	13/100	24/100
Impact	42/100	39/100	25/100
Stiffness	66/100	64/100	75/100
Consistency	70/100	72/100	73/100
Layer adhesion	11/100	11/100	19/100
Thermal	40/100	—	—

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	1.88 MPa	1.079 MPa	57.4%	9	9/10
Tensile flat	16.965 MPa	4.413 MPa	26%	10	10/10
Impact upright	110.155 kJ/m ²	23.179 kJ/m ²	21%	10	10/10
Impact flat	728.495 kJ/m ²	113.902 kJ/m ²	15.6%	10	10/10
Stiffness modulus	1984.002 MPa	—	—	—	—
Stiffness deflection	2.735 mm	—	—	—	—

Measurement provenance

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

Module	Measured date
Tensile	2026-08-19
Impact	2026-08-20
Stiffness	2026-08-18
Thermal	2026-08-20

Engineering interpretation

Summary: Yasin Standard White HIPS White has a specialized or limited engineering profile. It is above its material-family average by 0,2 points and below its manufacturer average by 2,9 points. Its strongest measured axis is Consistency, while the weakest axis is Layer Adhesion.

Data-driven review: Yasin Standard White HIPS White 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 15% overall, is roughly aligned with the material-family average, and is roughly aligned with the manufacturer average. Its strongest engineering signal is Consistency, while Layer Adhesion is the main limitation to consider before using it for demanding applications.

BEST FEATURE

Consistency

MAIN LIMITATION

Layer Adhesion

DATASET POSITION

Better than 15%
201 / 234

Strengths

- Best available signal: Consistency at 70/100.

Limitations

- Tensile: 12/100. Avoid using this as the primary choice for tensile-loaded parts.
- Layer adhesion: 11/100. 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

Metric rankings and percentiles

Metric	Score	Rank	Percentile
Overall	40/100	201 / 234	Better than 15%
Tensile	12/100	222 / 226	Better than 2%
Impact	42/100	44 / 226	Better than 81%

Metric	Score	Rank	Percentile
Stiffness	66/100	164 / 223	Better than 27%
Consistency	70/100	202 / 231	Better than 13%
Layer adhesion	11/100	195 / 226	Better than 14%
Thermal	40/100	51 / 209	Better than 76%

Decision guidance

- Use this material mainly for low-load, visual or experimental parts.
- Do not choose it as a tensile-strength benchmark material.

Better alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
No stronger same-base-material alternatives were identified in the current governed dataset.					

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
MAT0146	Thorwell Standard HIPS HIPS Blue	Thorwell	40/100	14/100	37/100

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](#)