

Yasin Standard Clear PVA Clear

Material Engineering Report
MaterialID MAT0231

3DPiceland Engineering Platform
3DPiceland Labs

Generated with 3DPiceland Engineering Platform v60.0.6 WORKFLOW-
RELIABILITY - Bug Fixes and Workflow Reliability
Generated 2026-08-25 19:02:26

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

\$67.20 USD/kg

Material identity

MaterialID	MAT0231
Material	Yasin Standard Clear PVA Clear
Manufacturer	Yasin
Product line	Standard
Base material	PVA
Category	Specialty
Variant / finish	—
Reinforcement	—
Color	Clear

Governed engineering profile

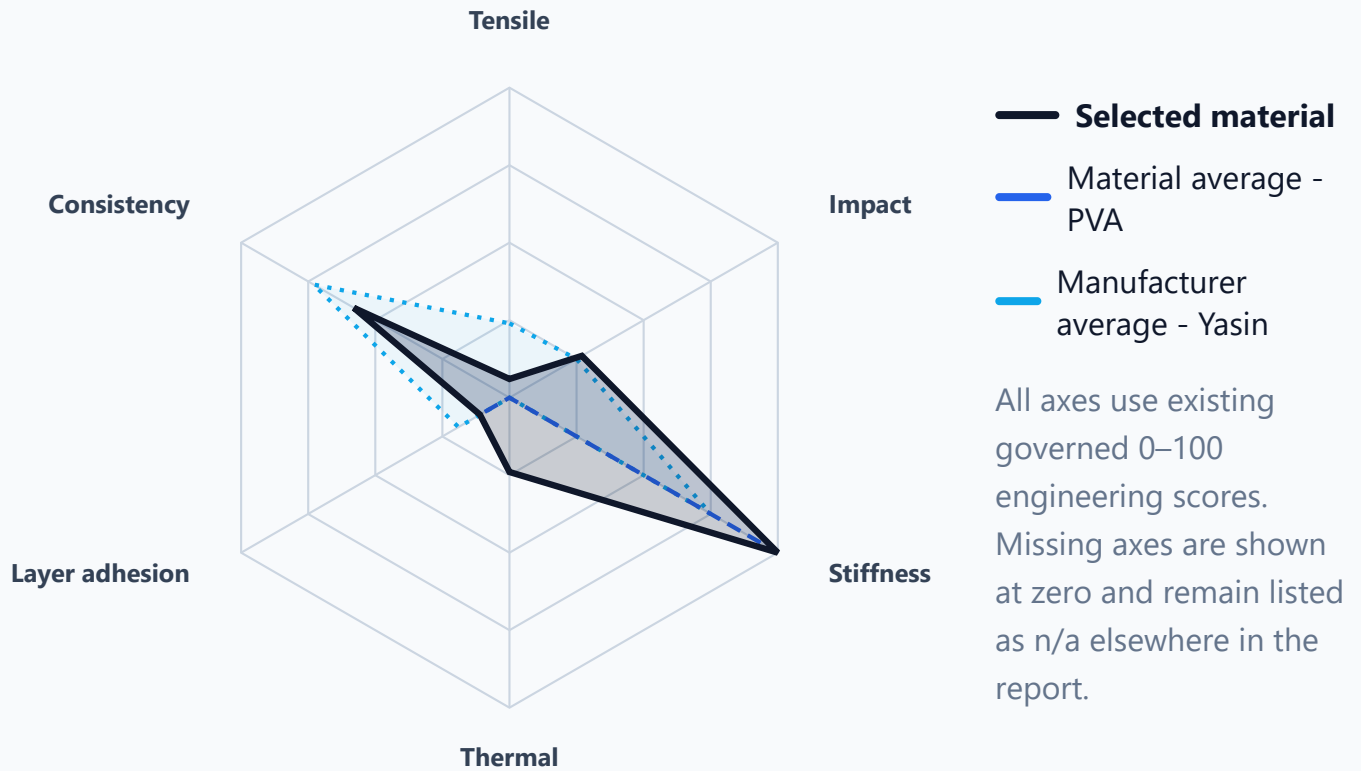
Overall	41/100
Tensile	6/100

Impact	27/100
Stiffness	100/100
Consistency	58/100
Layer adhesion	11/100
Thermal	24/100
Best available axis	stiffness

Engineering score profile



Engineering radar



Fixture thermal result

47 °C · score 24/100 · 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	41/100	41/100	43/100
Tensile	6/100	6/100	24/100
Impact	27/100	27/100	25/100
Stiffness	100/100	100/100	75/100
Consistency	58/100	58/100	73/100
Layer adhesion	11/100	11/100	19/100
Thermal	24/100	—	—

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 MPa	0.326 MPa	32.6%	2	2/10
Tensile flat	9.136 MPa	5.149 MPa	56.4%	10	10/10
Impact upright	56.675 kJ/m ²	22.563 kJ/m ²	39.8%	9	9/10
Impact flat	484.28 kJ/m ²	116.218 kJ/m ²	24%	10	10/10
Stiffness modulus	3925.792 MPa	—	—	—	—
Stiffness deflection	1.382 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 Clear PVA Clear has a specialized or limited engineering profile. It is above its material-family average by 0 points and below its manufacturer average by 2,4 points. Its strongest measured axis is Stiffness, while the weakest axis is Tensile.

Data-driven review: Yasin Standard Clear PVA Clear is best understood as a limited-use material that should be validated carefully before functional use. Compared with the current verified dataset, it ranks better than 16% overall, is roughly aligned with the material-family average, and is roughly aligned with the manufacturer average. Its strongest engineering signal is Stiffness, while Tensile is the main limitation to consider before using it for demanding applications.

BEST FEATURE

Stiffness

MAIN LIMITATION

Tensile

DATASET POSITION

Better than 16%
198 / 234

Strengths

- Stiffness: 100/100. Stiffness is a relative advantage in this comparison group.

Limitations

- Tensile: 6/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 27/100. Avoid high impact or shock-loaded components without additional validation.
- Layer adhesion: 11/100. Z-axis performance should be treated with caution.

Engineering trade-offs

- Stiffness is useful for shape stability, but impact tolerance is a separate limitation.
- The report should be read as a suitability warning rather than a general-purpose recommendation.

Recommended applications

- Rigid brackets, fixtures and shape-stable prototypes
- 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	41/100	198 / 234	Better than 16%

Metric	Score	Rank	Percentile
Tensile	6/100	225 / 226	Better than 1%
Impact	27/100	78 / 226	Better than 66%
Stiffness	100/100	1 / 223	Better than 100%
Consistency	58/100	226 / 231	Better than 3%
Layer adhesion	11/100	197 / 226	Better than 13%
Thermal	24/100	205 / 209	Better than 2%

Decision guidance

- Use this material mainly for low-load, visual or experimental parts.
- 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
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
No same-material peers with governed score context are available.					

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](#)