

Yasin Standard Clear PMMA Clear

Material Engineering Report
MaterialID MAT0035

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

\$36.80 USD/kg

Material identity

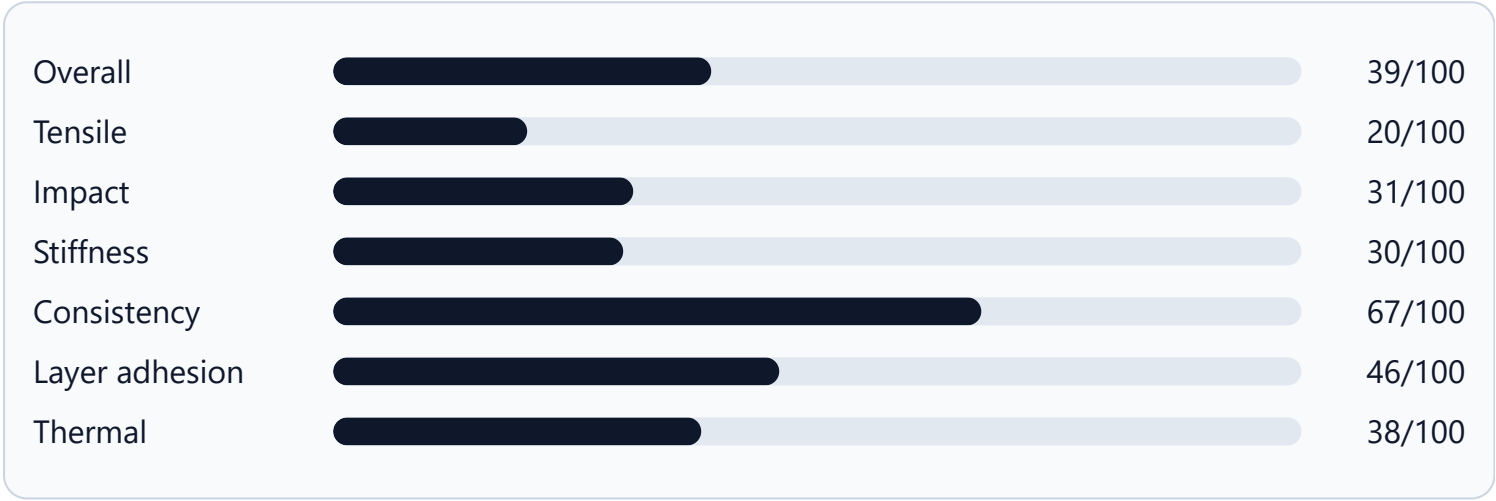
MaterialID	MAT0035
Material	Yasin Standard Clear PMMA Clear
Manufacturer	Yasin
Product line	Standard
Base material	PMMA
Category	Engineering
Variant / finish	—
Reinforcement	—
Color	Clear

Governed engineering profile

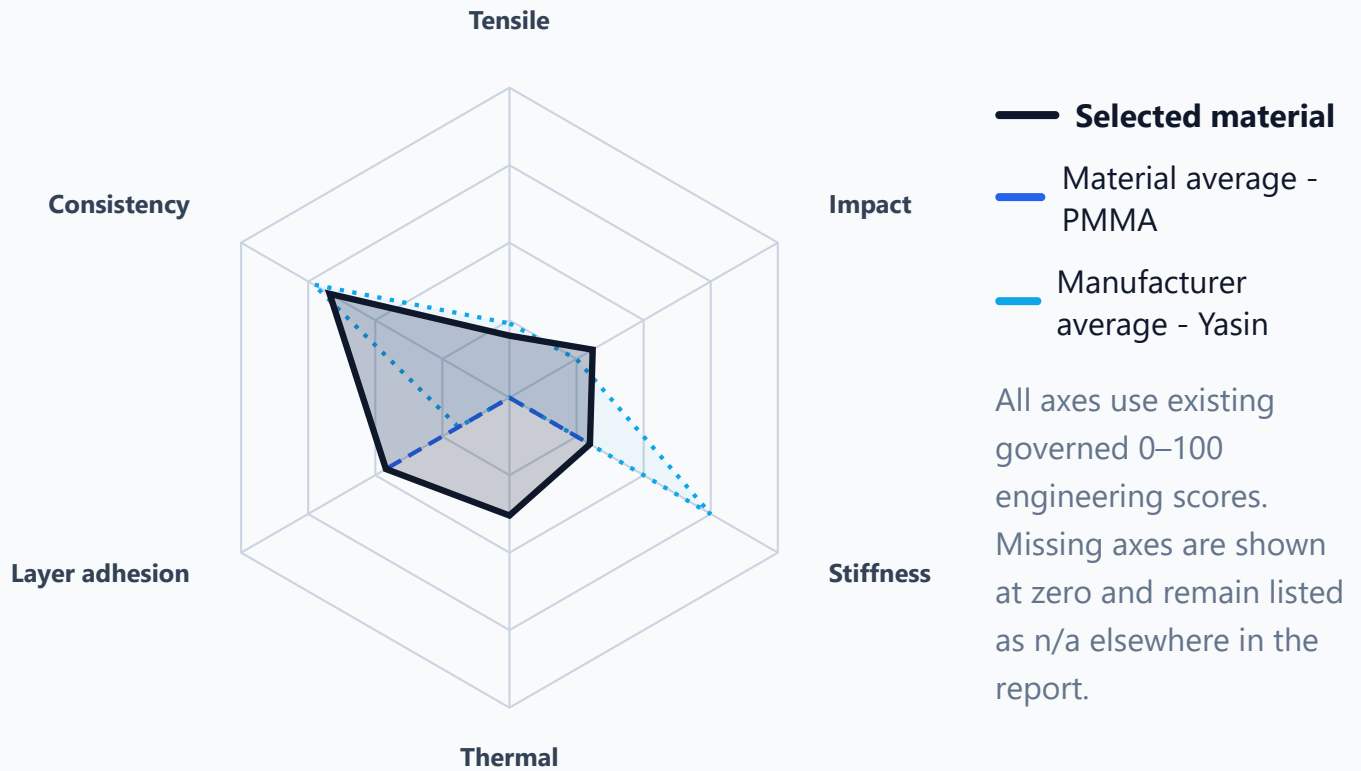
Overall	39/100
Tensile	20/100

Impact	31/100
Stiffness	30/100
Consistency	67/100
Layer adhesion	46/100
Thermal	38/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

76 °C · score 38/100 · 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	39/100	39/100	43/100
Tensile	20/100	20/100	24/100
Impact	31/100	31/100	25/100
Stiffness	30/100	30/100	75/100
Consistency	67/100	67/100	73/100
Layer adhesion	46/100	46/100	19/100
Thermal	38/100	—	—

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	9.998 MPa	3.148 MPa	31.5%	8	8/10
Tensile flat	21.718 MPa	5.207 MPa	24%	10	10/10
Impact upright	74.612 kJ/m ²	31.938 kJ/m ²	42.8%	10	10/10
Impact flat	545.901 kJ/m ²	168.401 kJ/m ²	30.8%	10	10/10
Stiffness modulus	887.078 MPa	—	—	—	—
Stiffness deflection	6.117 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 Clear PMMA Clear has a specialized or limited engineering profile. It is above its material-family average by 0 points and below its manufacturer average by 4,3 points. Its strongest measured axis is Consistency, while the weakest axis is Tensile.

Data-driven review: Yasin Standard Clear PMMA Clear 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 10% overall, is roughly aligned with the material-family average, and is below the manufacturer average by 4,3 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 10%
211 / 234

Strengths

- Best available signal: Consistency at 67/100.

Limitations

- Tensile: 20/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 31/100. Avoid high impact or shock-loaded components without additional validation.
- Stiffness: 30/100. Expect less shape stability than the stronger materials in the same family.

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	39/100	211 / 234	Better than 10%

Metric	Score	Rank	Percentile
Tensile	20/100	187 / 226	Better than 18%
Impact	31/100	60 / 226	Better than 74%
Stiffness	30/100	222 / 223	Better than 1%
Consistency	67/100	213 / 231	Better than 8%
Layer adhesion	46/100	29 / 226	Better than 88%
Thermal	38/100	58 / 209	Better than 73%

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](#)