

# Yasin Standard Soft PLA PLA Soft White

Material Engineering Report  
MaterialID MAT0094

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

**Partial**

ENGINEERING AXES

**4/6**

PUBLIC MSRP

**\$29.44 USD/kg**

## Material identity

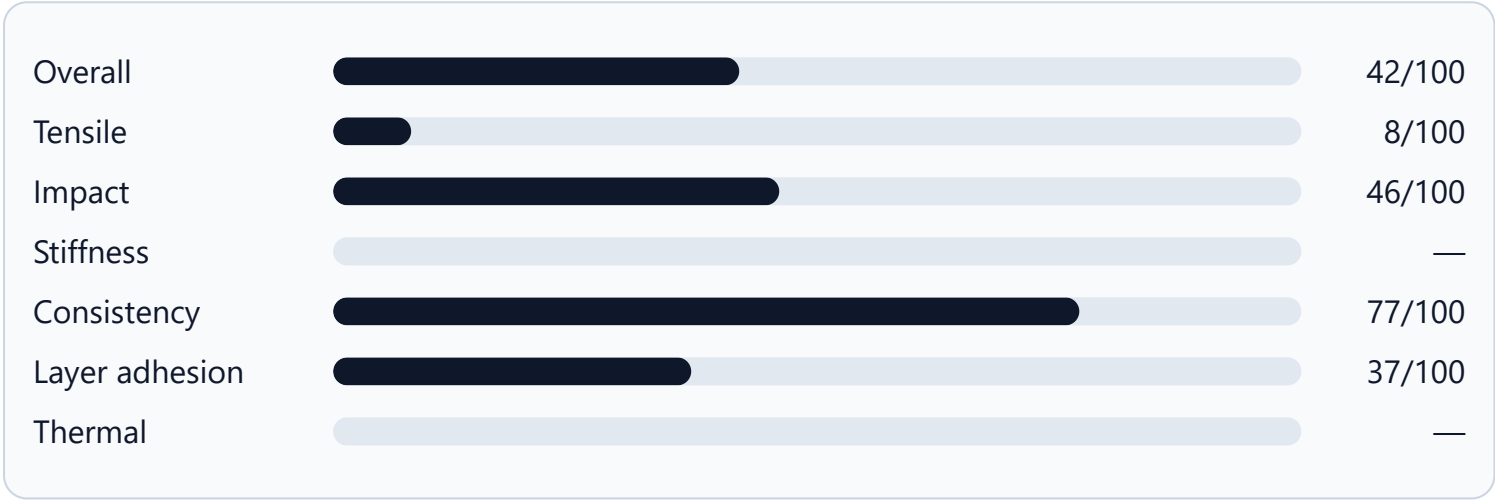
|                  |                                        |
|------------------|----------------------------------------|
| MaterialID       | MAT0094                                |
| Material         | Yasin Standard Soft PLA PLA Soft White |
| Manufacturer     | Yasin                                  |
| Product line     | Standard                               |
| Base material    | PLA                                    |
| Category         | Standard                               |
| Variant / finish | Soft                                   |
| Reinforcement    | —                                      |
| Color            | White                                  |

## Governed engineering profile

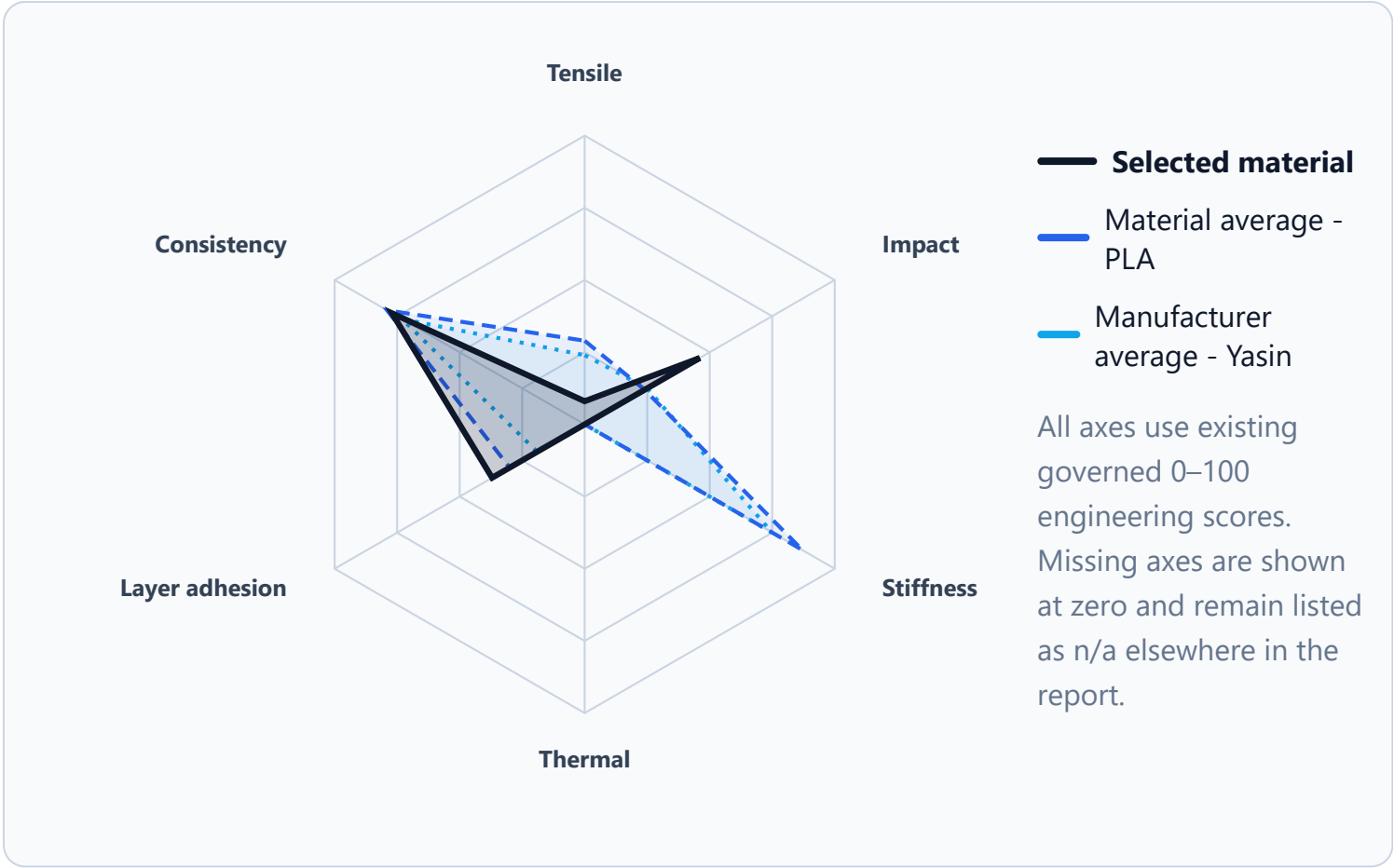
|         |        |
|---------|--------|
| Overall | 42/100 |
| Tensile | 8/100  |

|                     |             |
|---------------------|-------------|
| Impact              | 46/100      |
| Stiffness           | —           |
| Consistency         | 77/100      |
| Layer adhesion      | 37/100      |
| Thermal             | —           |
| Best available axis | consistency |

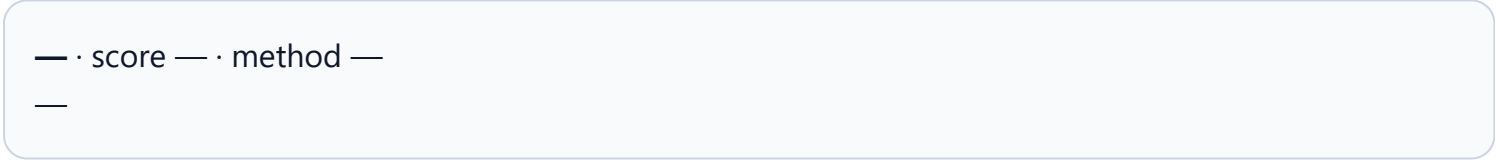
## Engineering score profile



## Engineering radar



## Fixture thermal result



## Material and manufacturer context

| Metric         | Selected material | Material average | Manufacturer average |
|----------------|-------------------|------------------|----------------------|
| Overall        | 42/100            | 50/100           | 43/100               |
| Tensile        | 8/100             | 29/100           | 24/100               |
| Impact         | 46/100            | 24/100           | 25/100               |
| Stiffness      | —                 | 87/100           | 75/100               |
| Consistency    | 77/100            | 79/100           | 73/100               |
| Layer adhesion | 37/100            | 30/100           | 19/100               |
| Thermal        | —                 | —                | —                    |

## 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      | 3.623 MPa                 | 0.796 MPa                | 22%  | 9       | 9/10       |
| Tensile flat         | 9.751 MPa                 | 1.071 MPa                | 11%  | 10      | 10/10      |
| Impact upright       | 165.801 kJ/m <sup>2</sup> | 76.197 kJ/m <sup>2</sup> | 46%  | 10      | 10/10      |
| Impact flat          | 752.168 kJ/m <sup>2</sup> | 74.228 kJ/m <sup>2</sup> | 9.9% | 10      | 10/10      |
| Stiffness modulus    | —                         | —                        | —    | —       | —          |
| Stiffness deflection | —                         | —                        | —    | —       | —          |

## 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 Soft PLA PLA Soft White has a specialized or limited engineering profile. It is below its material-family average by 7,9 points and below its manufacturer average by 0,8 points. Its strongest measured axis is Consistency, while the weakest axis is Tensile.

**Data-driven review:** Yasin Standard Soft PLA PLA Soft 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 24% overall, is below the material-family average by 7,9 points, and is roughly aligned with the manufacturer average. 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 24%  
180 / 234

Strengths

- Layer adhesion: 37/100. Z-axis bonding is better than the material-family context.
- Consistency: 77/100. Repeatability is one of the stronger signals in this material profile.
- Impact: 46/100. Impact behavior is competitive against the material-family context.

Limitations

- Tensile: 8/100. Avoid using this as the primary choice for tensile-loaded parts.
- Layer adhesion: 37/100. 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

Metric rankings and percentiles

| Metric         | Score  | Rank      | Percentile      |
|----------------|--------|-----------|-----------------|
| Overall        | 42/100 | 180 / 234 | Better than 24% |
| Tensile        | 8/100  | 224 / 226 | Better than 1%  |
| Impact         | 46/100 | 36 / 226  | Better than 85% |
| Stiffness      | —      | —         | —               |
| Consistency    | 77/100 | 127 / 231 | Better than 45% |
| Layer adhesion | 37/100 | 56 / 226  | Better than 76% |

| Metric  | Score | Rank | Percentile |
|---------|-------|------|------------|
| Thermal | —     | —    | —          |

## 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.

## Better alternatives

| MaterialID | Material                                     | Manufacturer | Overall | Tensile | Impact |
|------------|----------------------------------------------|--------------|---------|---------|--------|
| MAT0069    | ProtoPasta HTPLA Blood of My Enemies PLA Red | ProtoPasta   | 100/100 | —       | —      |
| MAT0079    | Polymaker PolyLight PLA Pro Black            | Polymaker    | 65/100  | 35/100  | 52/100 |
| MAT0109    | Polymaker PolyMax PLA Black                  | Polymaker    | 64/100  | 32/100  | 62/100 |

## 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 |
|------------|----------------------------------------------|--------------|---------|---------|--------|
| MAT0069    | ProtoPasta HTPLA Blood of My Enemies PLA Red | ProtoPasta   | 100/100 | —       | —      |
| MAT0079    | Polymaker PolyLight PLA Pro Black            | Polymaker    | 65/100  | 35/100  | 52/100 |
| MAT0109    | Polymaker PolyMax PLA Black                  | Polymaker    | 64/100  | 32/100  | 62/100 |
| MAT0080    | Polymaker PolySonic PLA Pro Blue             | Polymaker    | 64/100  | 30/100  | 58/100 |
| MAT0076    | BambuLab Tough+ PLA Tough+ Black             | BambuLab     | 63/100  | 26/100  | 59/100 |
| MAT0108    | Polymaker PolyLight PLA Black                | Polymaker    | 61/100  | 33/100  | 14/100 |
| MAT0074    | Winkle Matte PLA Matte Red                   | Winkle       | 60/100  | 34/100  | —      |

| MaterialID | Material                     | Manufacturer | Overall | Tensile | Impact |
|------------|------------------------------|--------------|---------|---------|--------|
| MAT0122    | Add:North Enhanced PLA Clear | Add:North    | 59/100  | 40/100  | 10/100 |

## Public links

[Manufacturer website](#) [Video review](#) [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](#)