

Public printing recommendation

# Prusa3D Prusament Mistic Green PLA Green

MaterialID MAT0133

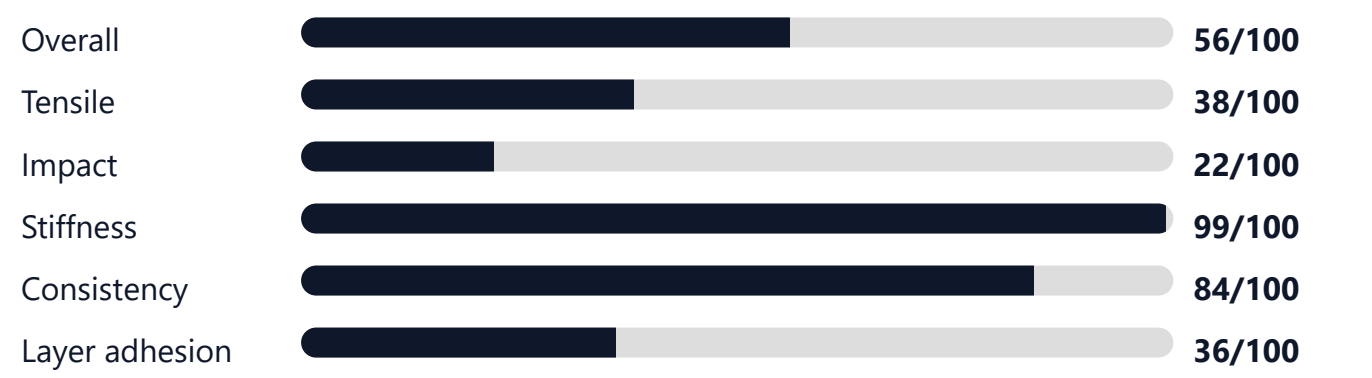


3DPiceland Labs  
Generated with 3DPiceland Engineering Platform v60.0.6  
WORKFLOW-RELIABILITY - Bug Fixes and Workflow  
Reliability  
2026-08-25 19:05:46

**Guidance boundary:** values below are shared base-material guidance resolved only through the canonical BaseMaterialId link. They are not manufacturer-, spool- or printer-specific validated settings. Missing fields remain Not recorded.

|                   |                         |                         |                      |
|-------------------|-------------------------|-------------------------|----------------------|
| Overall<br>56/100 | Engineering axes<br>6/5 | Public rank<br>25 / 234 | MSRP USD/kg<br>25.60 |
|-------------------|-------------------------|-------------------------|----------------------|

## Engineering profile



### Recommended applications

- Rigid brackets, fixtures and shape-stable prototypes
- Repeatable print jobs and production-style batches
- Cosmetic parts, concept models or low-load prototypes
- Avoid high impact components

### Measured strengths

- Layer adhesion: 36/100. Z-axis bonding is better than the material-family context.
- Consistency: 84/100. Repeatability is one of the stronger signals in this material profile.
- Tensile: 38/100. Tensile behavior is competitive against the material-family context.

- Stiffness: 99/100. Stiffness is a relative advantage in this comparison group.

### Limitations

- Tensile: 38/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 22/100. Avoid high impact or shock-loaded components without additional validation.
- Layer adhesion: 36/100. Z-axis performance should be treated with caution.

### Engineering trade-offs

- Good repeatability does not compensate for low tensile capability in load-bearing designs.
- Stiffness is useful for shape stability, but impact tolerance is a separate limitation.

## Base-material printing guidance

| Guidance                   | Minimum | Recommended   | Maximum | Unit  |
|----------------------------|---------|---------------|---------|-------|
| Nozzle temperature         | 195     | 230           | 230     | °C    |
| Bed temperature            | 60      | 60            | 70      | °C    |
| Print speed                | 55      | 165           | 165     | mm/s  |
| Cooling                    | 20      | 80            | 85      | %     |
| Guidance                   |         | Value         |         | Unit  |
| Cooling guidance           |         | High          |         |       |
| Drying temperature         |         | 50            |         | °C    |
| Drying time                |         | 5             |         | hours |
| Enclosure                  |         | Not required  |         |       |
| Printer / G-code reference |         | PrusaCoreOneL |         |       |
| Slicer profile reference   |         | Prusament PLA |         |       |

## Print workflow checks

- Confirm nozzle temperature, bed temperature, speed, cooling and drying requirements from the manufacturer profile or spool label.
- Print a small validation part before committing to a long, costly or safety-relevant print.

- Orient the part so the governing load does not rely on an unverified or weak engineering axis.
- Layer-adhesion evidence is weak; avoid critical Z-axis loading without additional validation.

## Decision guidance

- Use this material for moderate requirements after checking the weakest axis.
- Review the listed alternatives if the application needs stronger overall performance.
- Avoid selecting it for impact-focused testing or shock-loaded designs.

## Stronger same-family 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 |

Confirm exact settings against the manufacturer profile, spool label and actual printer/material combination. Results do not replace application-specific validation.

[Testing methodology](#) · [Download PDF](#)

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