



Extrudr DuraPro Neon Green ASA GF Green

Material Engineering Report
MaterialID MAT0011

3DPiceland Engineering Platform
3DPiceland Labs
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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

\$42.27 USD/kg

Material identity

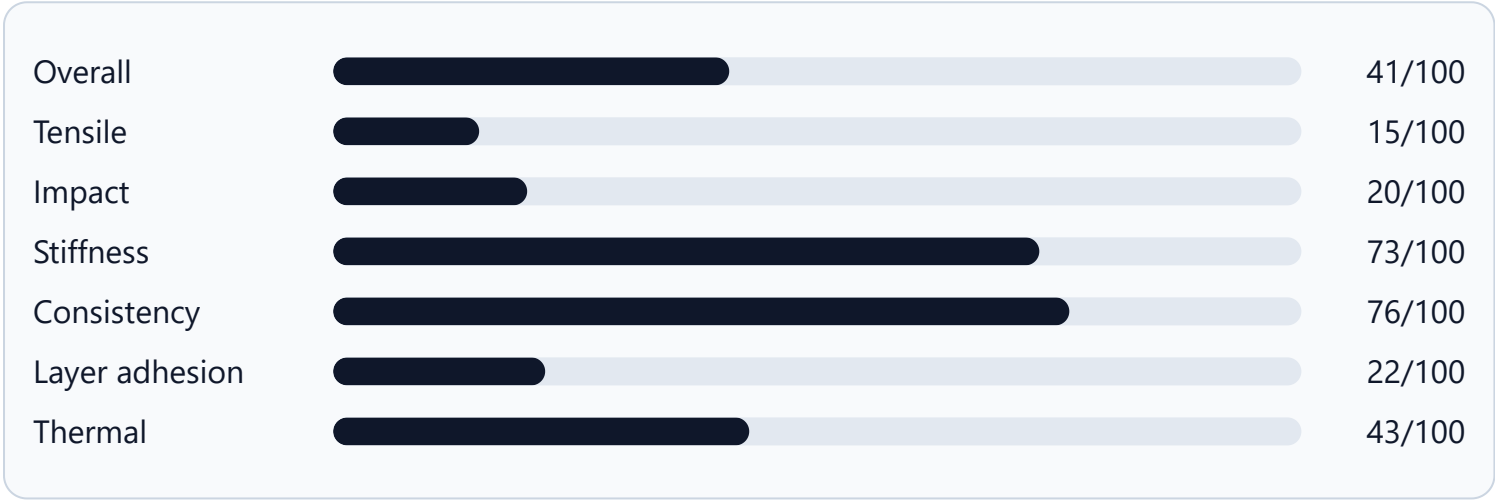
MaterialID	MAT0011
Material	Extrudr DuraPro Neon Green ASA GF Green
Manufacturer	Extrudr
Product line	DuraPro
Base material	ASA
Category	Engineering
Variant / finish	—
Reinforcement	GF
Color	Green

Governed engineering profile

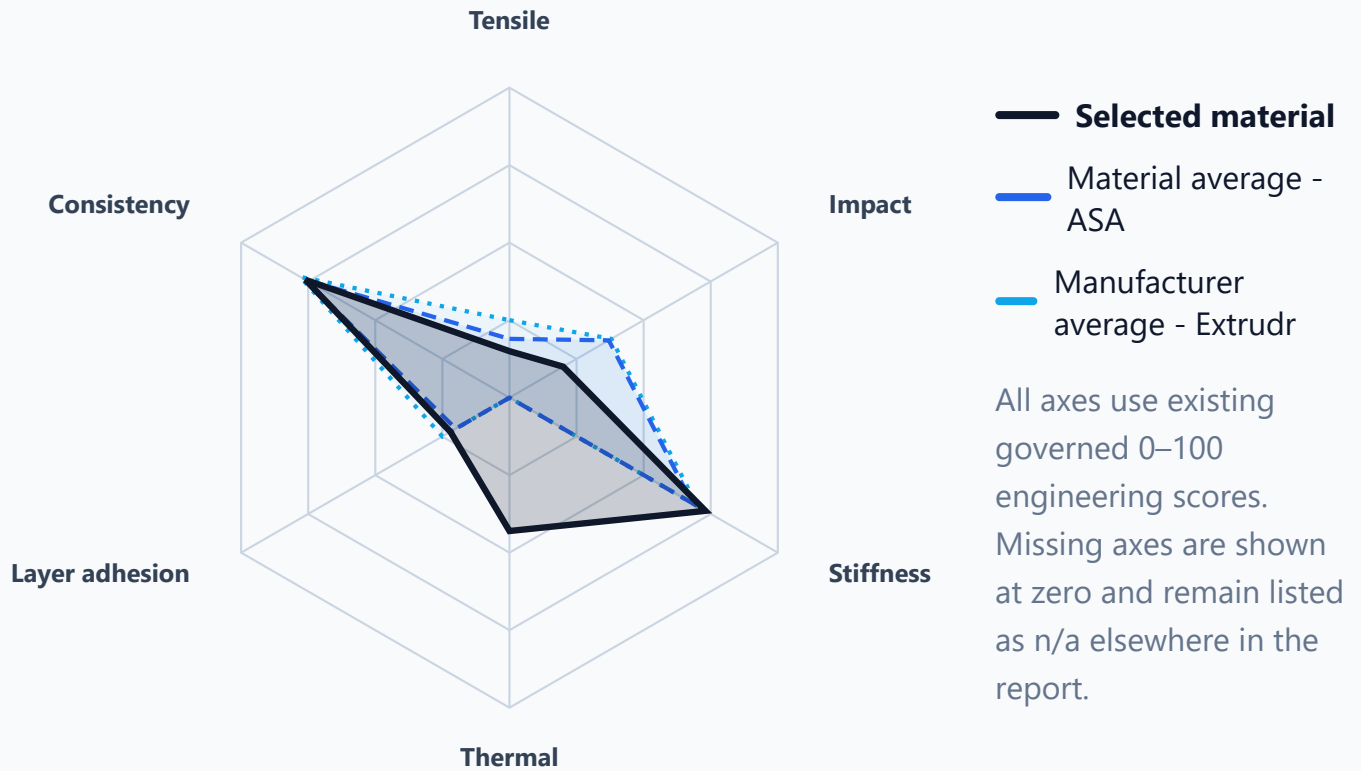
Overall	41/100
Tensile	15/100

Impact	20/100
Stiffness	73/100
Consistency	76/100
Layer adhesion	22/100
Thermal	43/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

85 °C · score 43/100 · 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	44/100	47/100
Tensile	15/100	19/100	25/100
Impact	20/100	37/100	38/100
Stiffness	73/100	68/100	70/100
Consistency	76/100	76/100	78/100
Layer adhesion	22/100	20/100	25/100
Thermal	43/100	—	—

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	4.476 MPa	2.383 MPa	53.2%	10	10/10
Tensile flat	20.057 MPa	4.08 MPa	20.3%	10	10/10
Impact upright	78.75 kJ/m ²	9.932 kJ/m ²	12.6%	10	10/10
Impact flat	320.991 kJ/m ²	31.263 kJ/m ²	9.7%	10	10/10
Stiffness modulus	2196.574 MPa	—	—	—	—
Stiffness deflection	2.47 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: Extrudr DuraPro Neon Green ASA GF Green has a specialized or limited engineering profile. It is below its material-family average by 2,8 points and below its manufacturer average by 5,8 points. Its strongest measured axis is Consistency, while the weakest axis is Tensile.

Data-driven review: Extrudr DuraPro Neon Green ASA GF Green 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 19% overall, is roughly aligned with the material-family average, and is below the manufacturer average by 5,8 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 19%
191 / 234

Strengths

- Consistency: 76/100. Repeatability is one of the stronger signals in this material profile.
- Stiffness: 73/100. Stiffness is a relative advantage in this comparison group.

Limitations

- Tensile: 15/100. Avoid using this as the primary choice for tensile-loaded parts.
- Impact: 20/100. Avoid high impact or shock-loaded components without additional validation.
- Layer adhesion: 22/100. 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.
- The report should be read as a suitability warning rather than a general-purpose recommendation.

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 tensile load applications
- Avoid high impact components

Metric rankings and percentiles

Metric	Score	Rank	Percentile
Overall	41/100	191 / 234	Better than 19%
Tensile	15/100	209 / 226	Better than 8%
Impact	20/100	131 / 226	Better than 42%
Stiffness	73/100	131 / 223	Better than 42%
Consistency	76/100	153 / 231	Better than 34%
Layer adhesion	22/100	123 / 226	Better than 46%
Thermal	43/100	36 / 209	Better than 83%

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.
- Avoid selecting it for impact-focused testing or shock-loaded designs.

Better alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0014	Extrudr DuraPro Emerald Green ASA Green	Extrudr	51/100	21/100	49/100
MAT0015	Prusa3D Prusament ASA Pro Green	Prusa3D	48/100	23/100	44/100
MAT0211	Eryone Standard Black ASA High Speed Black	Eryone	48/100	19/100	50/100

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
MAT0014	Extrudr DuraPro Emerald Green ASA Green	Extrudr	51/100	21/100	49/100
MAT0015	Prusa3D Prusament ASA Pro Green	Prusa3D	48/100	23/100	44/100
MAT0211	Eryone Standard Black ASA High Speed Black	Eryone	48/100	19/100	50/100
MAT0016	Extrudr DuraPro ASA Red	Extrudr	48/100	19/100	50/100
MAT0148	Thorwell Standard ASA ASA Yellow	Thorwell	46/100	22/100	56/100
MAT0216	Eryone Standard White ASA White	Eryone	46/100	23/100	51/100
MAT0017	Yasin Standard White ASA White	Yasin	46/100	21/100	51/100
MAT0179	BambuLab Standard Blue ASA Blue	BambuLab	45/100	22/100	45/100

Public links

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

Methodology and limitations

Results are comparative 3DPIceland 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](#)