

Extrudr DuraPro Emerald Green ASA Green

Material Engineering Report
MaterialID MAT0014

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

\$21.97 USD/kg

Material identity

MaterialID	MAT0014
Material	Extrudr DuraPro Emerald Green ASA Green
Manufacturer	Extrudr
Product line	DuraPro
Base material	ASA
Category	Engineering
Variant / finish	—
Reinforcement	—
Color	Green

Governed engineering profile

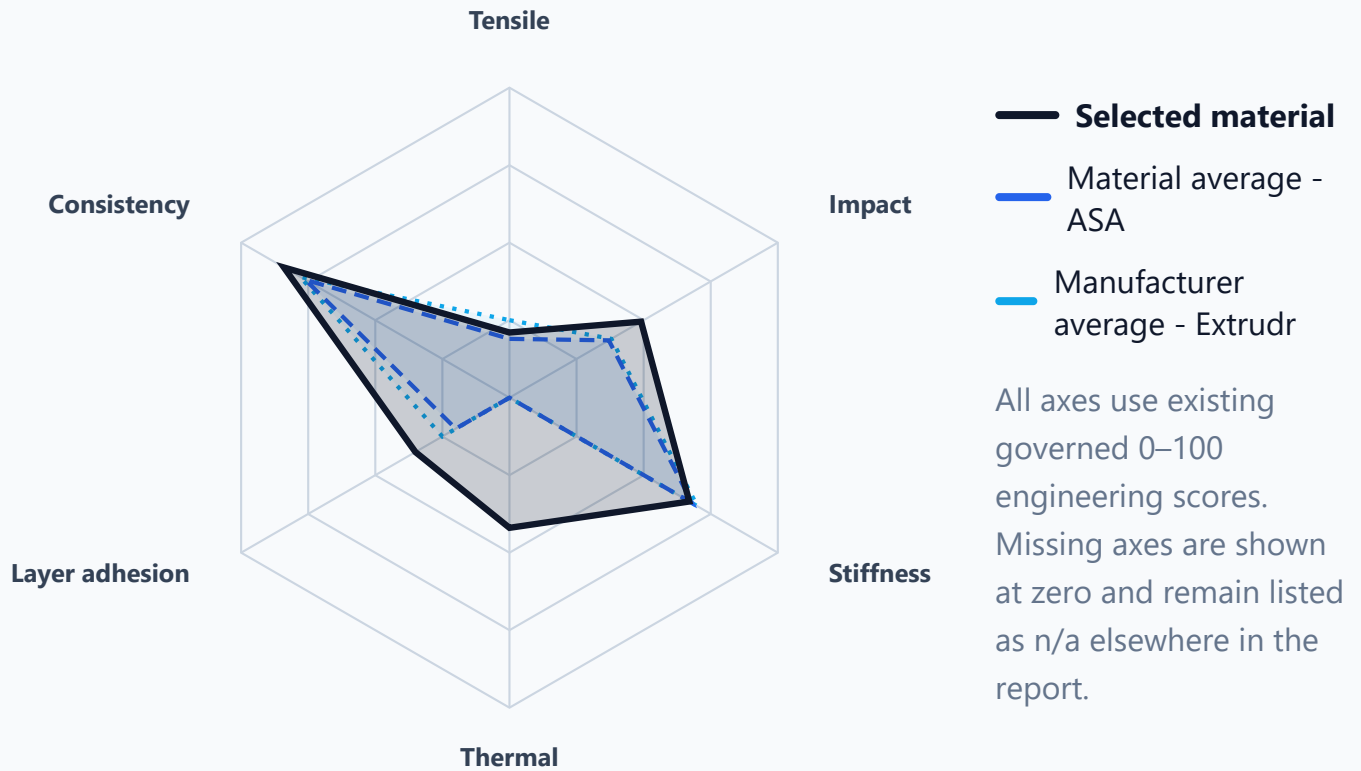
Overall	51/100
Tensile	21/100

Impact	49/100
Stiffness	67/100
Consistency	84/100
Layer adhesion	35/100
Thermal	42/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

83 °C · score 42/100 · 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	51/100	44/100	47/100
Tensile	21/100	19/100	25/100
Impact	49/100	37/100	38/100
Stiffness	67/100	68/100	70/100
Consistency	84/100	76/100	78/100
Layer adhesion	35/100	20/100	25/100
Thermal	42/100	—	—

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	8.818 MPa	1.792 MPa	20.3%	9	9/10
Tensile flat	25.178 MPa	1.594 MPa	6.3%	10	10/10
Impact upright	85.561 kJ/m ²	24.545 kJ/m ²	28.7%	10	10/10
Impact flat	898.254 kJ/m ²	70.287 kJ/m ²	7.8%	10	10/10
Stiffness modulus	2005.568 MPa	—	—	—	—
Stiffness deflection	2.706 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 Emerald Green ASA Green has a specialized or limited engineering profile. It is above its material-family average by 7 points and above its manufacturer average by 4 points. Its strongest measured axis is Consistency, while the weakest axis is Tensile.

Data-driven review: Extrudr DuraPro Emerald Green ASA 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 70% overall, is above the material-family average by 7 points, and is above the manufacturer average by 4 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 70%
72 / 234

Strengths

- Layer adhesion: 35/100. Z-axis bonding is better than the material-family context.
- Consistency: 84/100. Repeatability is one of the stronger signals in this material profile.
- Impact: 49/100. Impact behavior is competitive against the material-family context.

Limitations

- Tensile: 21/100. Avoid using this as the primary choice for tensile-loaded parts.
- Layer adhesion: 35/100. Z-axis performance should be treated with caution.

Engineering trade-offs

- Good repeatability does not compensate for low tensile capability in load-bearing designs.

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	51/100	72 / 234	Better than 70%
Tensile	21/100	175 / 226	Better than 23%

Metric	Score	Rank	Percentile
Impact	49/100	29 / 226	Better than 88%
Stiffness	67/100	162 / 223	Better than 28%
Consistency	84/100	35 / 231	Better than 85%
Layer adhesion	35/100	63 / 226	Better than 73%
Thermal	42/100	41 / 209	Better than 81%

Decision guidance

- Use this material for moderate requirements after checking the weakest axis.
- Do not choose it as a tensile-strength benchmark material.

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
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

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0012	Prusa3D Prusament Galaxy Black ASA Black	Prusa3D	45/100	18/100	42/100

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](#)