

Public printing recommendation

Extrudr DuraPro Neon Green PC/PBT Green

MaterialID MAT0031



3DP Iceland Labs
Generated with 3DP Iceland 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 61/100	Engineering axes 6/5	Public rank 8 / 234	MSRP USD/kg 45.64
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Engineering profile



Recommended applications

- Impact-aware parts where toughness matters
- Repeatable print jobs and production-style batches
- Cosmetic parts, concept models or low-load prototypes
- Avoid high tensile load applications

Measured strengths

- Layer adhesion: 43/100. Z-axis bonding is better than the material-family context.
- Consistency: 92/100. Repeatability is one of the stronger signals in this material profile.
- Impact: 70/100. Impact behavior is competitive against the material-family context.
- Tensile: 33/100. Tensile behavior is competitive against the material-family context.

Limitations

- Tensile: 33/100. Avoid using this as the primary choice for tensile-loaded parts.

Engineering trade-offs

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

Base-material printing guidance

Guidance	Minimum	Recommended	Maximum	Unit
Nozzle temperature	260	275	290	°C
Bed temperature	90	110	120	°C
Print speed	55	110	130	mm/s
Cooling	0	10	15	%
Guidance	Value			Unit
Cooling guidance	Low			
Drying temperature	80			°C
Drying time	8			hours
Enclosure	Required			
Printer / G-code reference	PrusaCoreOneL			
Slicer profile reference	Extrudr DuraPro PC/PBT			

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.
- Engineering/high-temperature family: confirm enclosure, ventilation, warping control and material-specific drying requirements.

Decision guidance

- Use this material for moderate requirements after checking the weakest axis.

- Do not choose it as a tensile-strength benchmark material.

Stronger same-family alternatives

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

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