

Public printing recommendation

3DTech Themax

3DTech Themax PSU

PSU Natural

MaterialID MAT0270



3DPiceland Labs
Generated with 3DPiceland Engineering Platform v70.0.4
DIRECT-IMPACT-METHODOLOGY - Izod and Charpy
Methodology
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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 —	Engineering axes 0/8	Public rank —	MSRP USD/kg 271.74
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Engineering profile

Overall		—
Tensile		—
Impact		—
Izod		—
Charpy		—
Stiffness		—
Consistency		—
Layer adhesion		—

Recommended applications

- Application guidance awaits sufficient measured evidence and approved score references

Measured strengths

- No scored strength is available yet.

Limitations

- No scored limitation can be established from the available evidence.

Engineering trade-offs

- Complete scoring evidence and approved method references are required before assessing an overall balance of properties.

Base-material printing guidance

Guidance	Minimum	Recommended	Maximum	Unit
Nozzle temperature	350	365	380	°C
Bed temperature	140	150	160	°C
Print speed	20	30	40	mm/s
Cooling	0	0	0	%
Guidance	Value			Unit
Cooling guidance	Off			
Drying temperature	120			°C
Drying time	4			hours
Enclosure	Heated chamber recommended			
Printer / G-code reference	PrusaCoreOneL			
Slicer profile reference	3DTech PSU			

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.
- Repeatability is low on the internal scale; run extra validation specimens before relying on the profile.

Decision guidance

- Overall suitability is unavailable until the required measurements and method references are complete.

Stronger same-family alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact	Izod	Charpy
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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Score policy engineering-score-v70-1: Overall requires tensile, stiffness, consistency, layer adhesion and the Izod/Charpy impact family, each with equal weight. Both impact methods and configured versioned references are required. Missing results and unconfigured scores remain n/a. Legacy Impact is historical only; thermal remains separate. Engineering-axis counts describe displayed evidence, not Overall completeness.