

Polymaker PolyMax PLA Black

MaterialID MAT0109



3DPiceland Labs
Generated with 3DPiceland Engineering Platform v60.0.6
WORKFLOW-RELIABILITY - Bug Fixes and Workflow
Reliability
2026-08-25 19:04:35

Traceability boundary: canonical per-module measured dates are shown below. Session identifier, time of day, operator, printer/slicer profile and environmental conditions are Not recorded and are never inferred.

Measurement provenance

Canonical SQLite measured dates use ISO format; missing dates remain Not recorded.

Module	Measured date
Tensile	Not recorded
Impact	Not recorded
Stiffness	Not recorded

Status Complete	Result modules 3/3	Specimen/result records 41	Public details Approved
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Specimen and result quality

Module	Orientation	Average	Std. dev.	CV	Specimens	Confidence	Validation
Tensile	Upright	20,964 MPa	3,725 MPa	0,178%	10	10/10	OK
Tensile	Flat	30,1 MPa	1,725 MPa	0,057%	10	10/10	OK

Module	Orientation	Average	Std. dev.	CV	Specimens	Confidence	Validation
Impact	Upright	188,753 kJ/m ²	17,659 kJ/m ²	0,094%	10	10/10	OK
Impact	Flat	1041,591 kJ/m ²	73,193 kJ/m ²	0,07%	10	10/10	OK
Stiffness	Three-point bend	2027,607 MPa	n/a	n/a	1	Complete	OK

Recorded native inputs

Module	Input set	Recorded values
Tensile	Upright force inputs (N)	130, 141, 104, 119, 103, 121, 164, 156, 164, 161
Tensile	Flat force inputs (N)	192, 211, 188, 204, 202, 189, 201, 201, 171, 198
Impact	Upright needle inputs (%)	11,00, 9,50, 11,00, 11,00, 11,00, 11,00, 10,50, 11,00, 13,50, 12,00
Impact	Flat needle inputs (%)	85,00, 69,00, 82,00, 71,00, 69,00, 57,00, 76,00, 62,00, 70,00, 66,00
Stiffness	Revolutions / degrees	2 / 190

Approved test notes

Method and equipment context

Purpose-built tensile, pendulum impact and three-point bend apparatus are used with the governed Settings Manager constants consumed by ResultsService. Results are comparative and do not claim accredited-laboratory equipment.

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

reports/test-sessions/MAT0109/