Public engineering report

Prima Creator PrimaValue Dark Gray ABS Gray

Material Engineering Report
MaterialID MAT0006

3DP Iceland Labs

3DPIceland Engineering Platform
3DPIceland Labs
Generated with 3DPIceland Engineering Platform v60.0.6
WORKFLOW-RELIABILITY - Bug Fixes and Workflow Reliability
Generated 2026-08-25 19:02:26

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	ENGINEERING AXES	PUBLIC MSRP
Complete	**6/6**	**$15.57 USD/kg**

Material identity

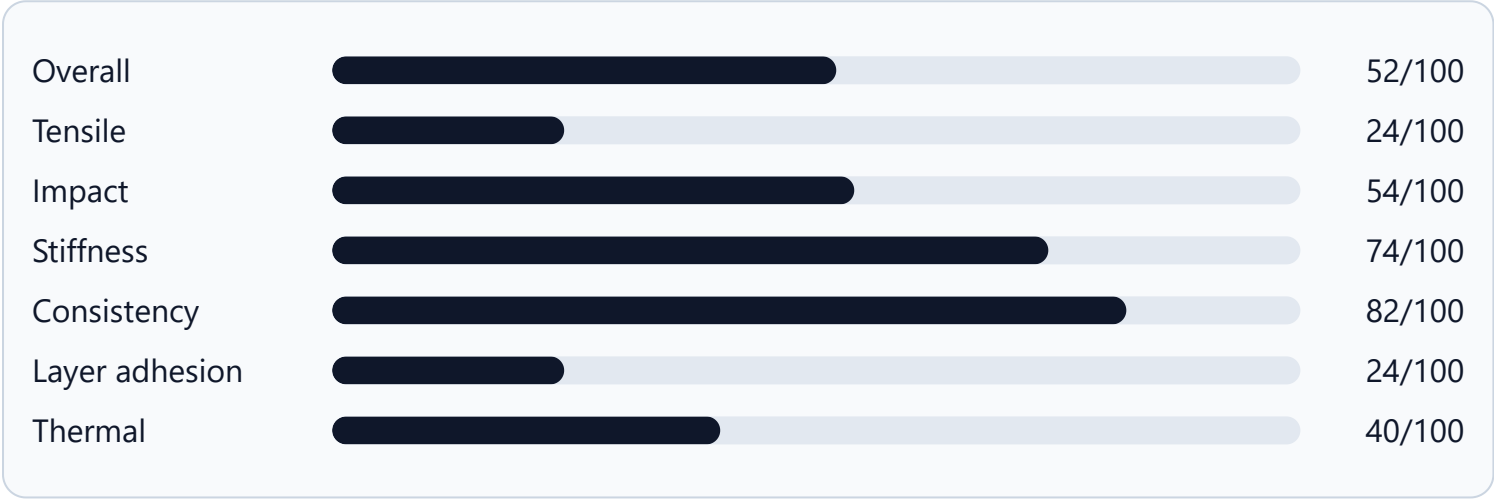
MaterialID	MAT0006
Material	Prima Creator PrimaValue Dark Gray ABS Gray
Manufacturer	Prima Creator
Product line	PrimaValue
Base material	ABS
Category	Engineering
Variant / finish	—
Reinforcement	—
Color	Gray

Governed engineering profile

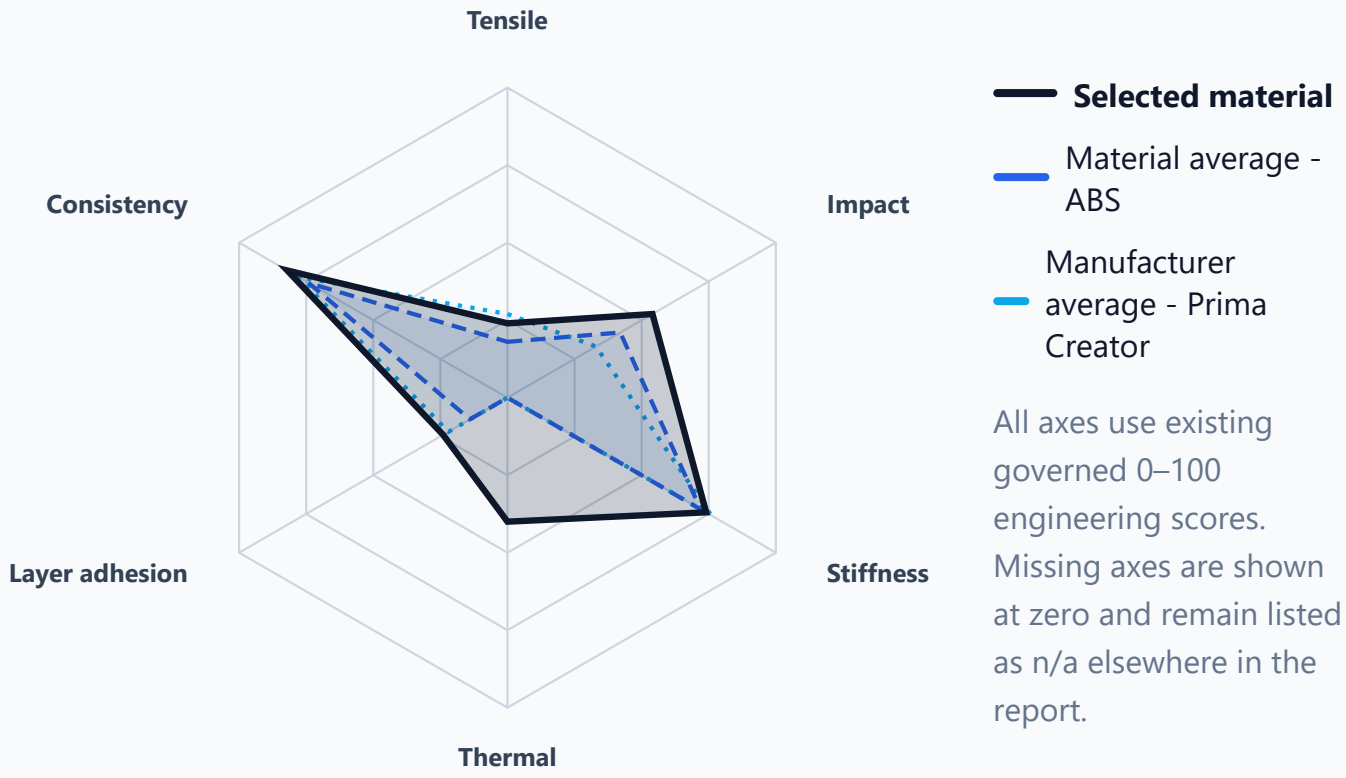
Overall	52/100
Tensile	24/100

Impact	54/100
Stiffness	74/100
Consistency	82/100
Layer adhesion	24/100
Thermal	40/100
Best available axis	consistency

Engineering score profile



Engineering radar



All axes use existing governed 0–100 engineering scores. Missing axes are shown at zero and remain listed as n/a elsewhere in the report.

Fixture thermal result

80 °C · score 40/100 · method 3dp-thermal-deflection-fixture-v1
Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland 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	52/100	45/100	47/100
Tensile	24/100	18/100	27/100
Impact	54/100	42/100	33/100
Stiffness	74/100	72/100	76/100
Consistency	82/100	74/100	78/100
Layer adhesion	24/100	14/100	22/100
Thermal	40/100	—	—

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	7.337 MPa	2.779 MPa	37.9%	10	10/10
Tensile flat	30.669 MPa	5.093 MPa	16.6%	10	10/10
Impact upright	138.255 kJ/m²	18.975 kJ/m²	13.7%	10	10/10
Impact flat	947.609 kJ/m²	42.848 kJ/m²	4.5%	10	10/10
Stiffness modulus	2223.039 MPa	—	—	—	—
Stiffness deflection	2.441 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: Prima Creator PrimaValue Dark Gray ABS Gray has a specialized or limited engineering profile. It is above its material-family average by 6,9 points and above its manufacturer average by 4,3 points. Its strongest measured axis is Consistency, while the weakest axis is Tensile.

Data-driven review: Prima Creator PrimaValue Dark Gray ABS Gray 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 72% overall, is above the material-family average by 6,9 points, and is above the manufacturer average by 4,3 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 72%
66 / 234

Strengths

- Layer adhesion: 24/100. Z-axis bonding is better than the material-family context.
- Consistency: 82/100. Repeatability is one of the stronger signals in this material profile.
- Impact: 54/100. Impact behavior is competitive against the material-family context.
- Tensile: 24/100. Tensile behavior is competitive against the material-family context.

Limitations

- Tensile: 24/100. Avoid using this as the primary choice for tensile-loaded parts.
- Layer adhesion: 24/100. 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

- 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

Metric rankings and percentiles

Metric	Score	Rank	Percentile
Overall	52/100	66 / 234	Better than 72%
Tensile	24/100	156 / 226	Better than 31%
Impact	54/100	13 / 226	Better than 95%
Stiffness	74/100	128 / 223	Better than 43%
Consistency	82/100	58 / 231	Better than 75%
Layer adhesion	24/100	111 / 226	Better than 51%
Thermal	40/100	51 / 209	Better than 76%

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
MAT0202	Siraya Tech Fiberheart White ABS High Temp White	Siraya Tech	49/100	21/100	54/100
MAT0207	Siraya Tech Fiberheart Black ABS Core CF Black	Siraya Tech	49/100	24/100	27/100
MAT0003	Prusa3D Buddy3D ABS Black	Prusa3D	48/100	19/100	53/100
MAT0007	FilaFarm Standard ABS Orange	FilaFarm	47/100	—	41/100

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0152	Thorwell Standard ABS ABS Yellow	Thorwell	47/100	20/100	53/100
MAT0181	BambuLab Standard Blue ABS Blue	BambuLab	46/100	19/100	53/100
MAT0005	Extrudr DuraPro ABS Blue	Extrudr	44/100	16/100	47/100
MAT0241	Yasin Standard Blue ABS Blue	Yasin	44/100	17/100	47/100

Public links

Manufacturer website 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