

FilaFarm Standard ABS Orange

Material Engineering Report
MaterialID MAT0007

3DPiceland Engineering Platform
3DPiceland Labs

Generated with 3DPiceland Engineering Platform v60.0.6 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

Partial

ENGINEERING AXES

3/6

PUBLIC MSRP

\$26.67 USD/kg

Material identity

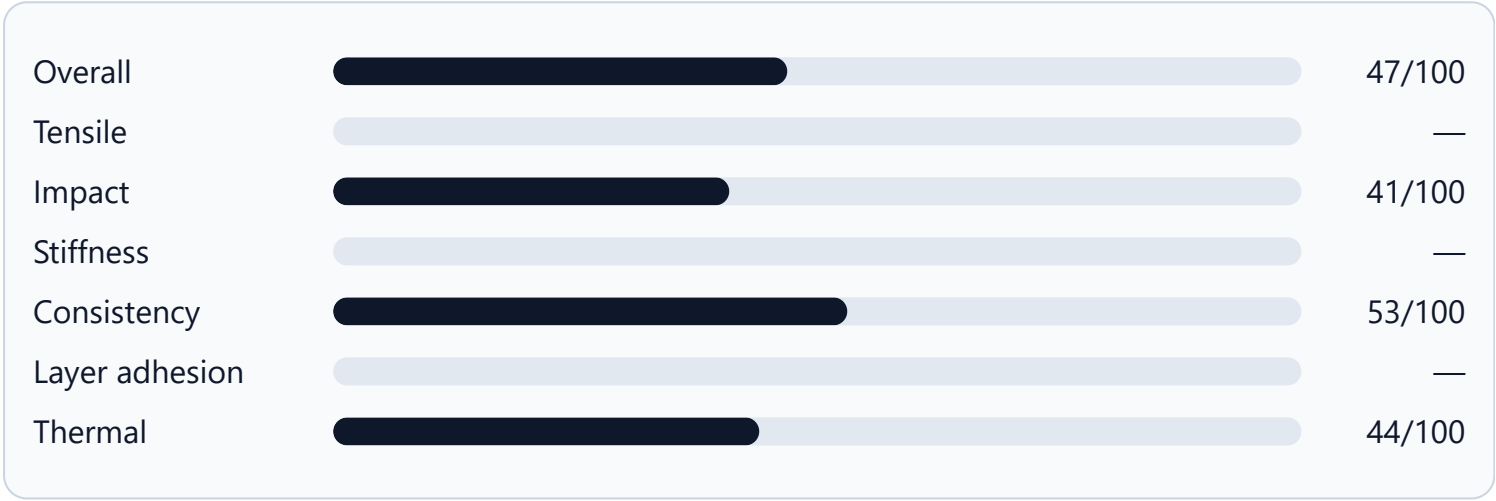
MaterialID	MAT0007
Material	FilaFarm Standard ABS Orange
Manufacturer	FilaFarm
Product line	Standard
Base material	ABS
Category	Engineering
Variant / finish	—
Reinforcement	—
Color	Orange

Governed engineering profile

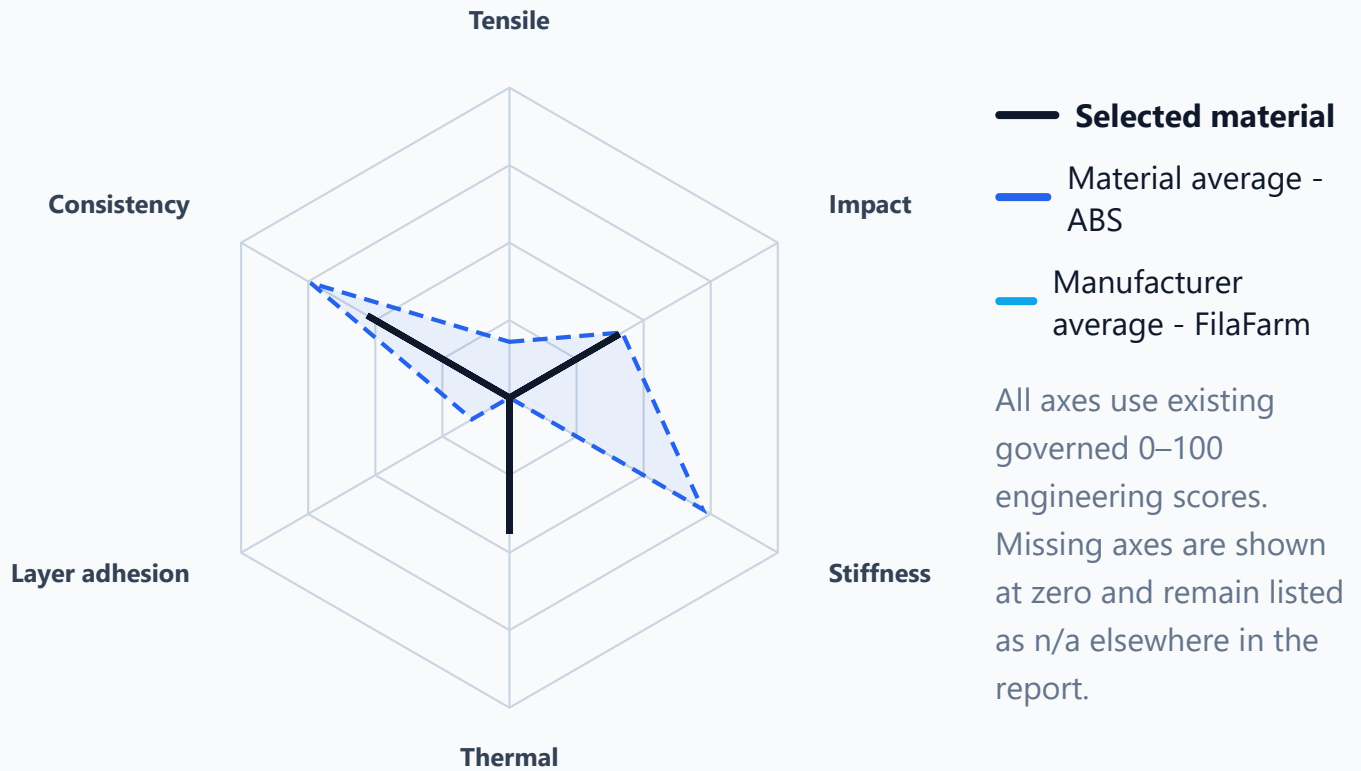
Overall	47/100
Tensile	—

Impact	41/100
Stiffness	—
Consistency	53/100
Layer adhesion	—
Thermal	44/100
Best available axis	consistency

Engineering score profile



Engineering radar



Fixture thermal result

88 °C · score 44/100 · 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	47/100	45/100	47/100
Tensile	—	18/100	—
Impact	41/100	42/100	41/100
Stiffness	—	72/100	—
Consistency	53/100	74/100	53/100
Layer adhesion	—	14/100	—
Thermal	44/100	—	—

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	—	—	—	—	—
Tensile flat	—	—	—	—	—
Impact upright	21.648 kJ/m ²	15.907 kJ/m ²	73.5%	10	10/10
Impact flat	806.778 kJ/m ²	47.632 kJ/m ²	5.9%	10	10/10
Stiffness modulus	—	—	—	—	—
Stiffness deflection	—	—	—	—	—

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	2026-08-24

Engineering interpretation

Summary: FilaFarm Standard ABS Orange has a specialized or limited engineering profile. It is above its material-family average by 2,5 points and above its manufacturer average by 0 points. Its strongest measured axis is Consistency, while the weakest axis is Impact.

Data-driven review: FilaFarm Standard ABS Orange is best understood as a limited-use material that should be validated carefully before functional use. Compared with the current verified dataset, it ranks better than 51% overall, is roughly aligned with the material-family average, and is roughly aligned with the manufacturer average. Its strongest engineering signal is Consistency, while Impact is the main limitation to consider before using it for demanding applications.

BEST FEATURE

Consistency

MAIN LIMITATION

Impact

DATASET POSITION

Better than 51%
115 / 234

Strengths

- Best available signal: Consistency at 53/100.

Limitations

- Consistency: 53/100. Repeatability may not be the best reason to choose this filament.

Engineering trade-offs

- The report should be read as a suitability warning rather than a general-purpose recommendation.

Recommended applications

- Cosmetic parts, concept models or low-load prototypes
- Avoid high tensile load applications

Metric rankings and percentiles

Metric	Score	Rank	Percentile
Overall	47/100	115 / 234	Better than 51%
Tensile	—	—	—
Impact	41/100	46 / 226	Better than 80%
Stiffness	—	—	—
Consistency	53/100	230 / 231	Better than 1%
Layer adhesion	—	—	—

Metric	Score	Rank	Percentile
Thermal	44/100	30 / 209	Better than 86%

Decision guidance

- Use this material mainly for low-load, visual or experimental parts.
- Review the listed alternatives if the application needs stronger overall performance.
- Do not choose it as a tensile-strength benchmark material.

Better alternatives

MaterialID	Material	Manufacturer	Overall	Tensile	Impact
MAT0006	Prima Creator PrimaValue Dark Gray ABS Gray	Prima Creator	52/100	24/100	54/100

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
MAT0006	Prima Creator PrimaValue Dark Gray ABS Gray	Prima Creator	52/100	24/100	54/100
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
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](#)