

## Public test session report

# Thorwell Standard PETG PETG Red

MaterialID MAT0150



3DP Iceland Labs

Generated with 3DP Iceland 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**

## Specimen and result quality

| Module  | Orientation | Average       | Std.<br>dev. | CV     | Specimens | Confidence | Validation |
|---------|-------------|---------------|--------------|--------|-----------|------------|------------|
| Tensile | Upright     | 8,183<br>MPa  | 2,383<br>MPa | 0,291% | 10        | 10/10      | OK         |
| Tensile | Flat        | 36,776<br>MPa | 6,818<br>MPa | 0,185% | 10        | 10/10      | OK         |

| Module    | Orientation      | Average                   | Std. dev.                | CV     | Specimens | Confidence | Validation |
|-----------|------------------|---------------------------|--------------------------|--------|-----------|------------|------------|
| Impact    | Upright          | 83,893 kJ/m <sup>2</sup>  | 28,994 kJ/m <sup>2</sup> | 0,346% | 10        | 10/10      | OK         |
| Impact    | Flat             | 227,398 kJ/m <sup>2</sup> | 19,345 kJ/m <sup>2</sup> | 0,085% | 10        | 10/10      | OK         |
| Stiffness | Three-point bend | 1524,894 MPa              | n/a                      | n/a    | 1         | Complete   | OK         |

## Recorded native inputs

| Module    | Input set                 | Recorded values                                                      |
|-----------|---------------------------|----------------------------------------------------------------------|
| Tensile   | Upright force inputs (N)  | 36, 58, 54, 62, 56, 59, 27, 52, 44, 84                               |
| Tensile   | Flat force inputs (N)     | 271, 193, 253, 242, 282, 262, 177, 281, 266, 164                     |
| Impact    | Upright needle inputs (%) | 6,00, 3,00, 6,00, 6,00, 3,50, 6,00, 7,00, 2,00, 4,00, 6,50           |
| Impact    | Flat needle inputs (%)    | 12,50, 13,00, 13,00, 11,50, 15,00, 13,00, 13,00, 13,50, 15,00, 14,50 |
| Stiffness | Revolutions / degrees     | 3 / 130                                                              |

## 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](#)

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