

# Tensile Test Report

## Test Information

|            |                    |
|------------|--------------------|
| Sample ID: | N/A                |
| Material:  | N/A                |
| Grade:     | N/A                |
| Standard:  | ISO 527 - Plastics |
| Date:      | 2025-12-08         |
| Operator:  | N/A                |
| Customer:  | N/A                |

## Specimen Dimensions

|                     |                      |
|---------------------|----------------------|
| Specimen Type:      | Type 1A              |
| Gauge Length:       | 50.0 mm              |
| Thickness:          | 4.0 mm               |
| Width:              | 10.0 mm              |
| Cross-Section Area: | 40.0 mm <sup>2</sup> |
| Grip Distance:      | 115.0 mm             |

## Mechanical Properties

| Property                  | Symbol         | Value  | Unit |
|---------------------------|----------------|--------|------|
| Ultimate Tensile Strength | $\sigma_{UTS}$ | 6.42   | MPa  |
| Yield Strength (Rp0.2)    | $\sigma_y$     | 0.00   | MPa  |
| Young's Modulus           | E              | 39.4   | MPa  |
| Elongation at Break       | $\epsilon_b$   | 50.00  | %    |
| Maximum Force             | F_max          | 80.73  | N    |
| Force at Yield            | F_y            | 0.00   | N    |
| Energy to Break           | U_b            | 1.4543 | J    |

## Test Conditions

|                |                      |
|----------------|----------------------|
| Control Mode:  | Displacement Control |
| Test Speed:    | 1.0 mm/min           |
| Temperature:   | 23.0 °C              |
| Humidity:      | 50.0 % RH            |
| Data Points:   | 1276                 |
| Test Duration: | 26.2 s               |

Tested by

Approved by