

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 ²
Grip Distance:	115.0 mm

Mechanical Properties

Property	Symbol	Value	Unit
Ultimate Tensile Strength	σ_{UTS}	6.45	MPa
Yield Strength (Rp0.2)	σ_y	4.75	MPa
Young's Modulus	E	39.9	MPa
Elongation at Break	ϵ_b	49.98	%
Maximum Force	F_max	81.11	N
Force at Yield	F_y	80.13	N
Energy to Break	U_b	1.4547	J

Test Conditions

Control Mode:	Displacement Control
Test Speed:	1.0 mm/min
Temperature:	23.0 °C
Humidity:	50.0 % RH
Data Points:	1274
Test Duration:	26.2 s

Tested by

Approved by