MATERIAL DATA SHEET

EN AW-7108-T7 single-certificate Young's modulus (CC BY observation)

One reported Young's-modulus observation for exact EN AW-7108-T7.

Field	Value
Material ID	mdpi-en-aw-7108-t7-single-certificate-modulus
Category	Metal
Condition	EN AW-7108-T7 material-test certificate; one observation only | not reported
Unit system	Common SI
Unit contract	Material properties stored in SI engineering units.
Generated	2026-11-15 23:20

Source and Validity

Field	Value
Quality	Experimental screening
Design release allowed	No
Source family	Experimental screening dataset
Confidence	Reference-grade
License	Open
Source note	Condition-specific base-material values from a CC BY 4.0 peer-reviewed article.
Citation	Davor Skejic, Tihomir Doksanovic, Ivan Cudina, and Federico M. Mazzolani, The Basis for Reliability-Based Mechanical Properties of Structural Aluminium Alloys, Applied Sciences 2021, 11, 4485, https://doi.org/10.3390/app11104485.
Valid temperature	Certificate/test temperature is not reported for this population; no temperature extrapolation is allowed.
Valid pressure	Pressure dependence is not represented.
Valid phase / condition	EN AW-7108-T7 material-test certificate; one observation only
Uncertainty	one EN AW-7108-T7 material-test-certificate observation; product form, size and direction not reported. This is a single observation, not a population statistic, product-form value, standard minimum or design allowable.
Last reviewed	2026-08-03
Reviewer	scripts/import_mdpi_open_aluminum_public.py
Review status	Checked
Review scope	Checked article CC BY notice, DOI and PDF hash, exact alloy/temper, source geometry, table values, and reported or measured rather than specified-minimum semantics.

Field	Value
Notes	one EN AW-7108-T7 material-test-certificate observation; product form, size and direction not reported. This is a single observation, not a population statistic, product-form value, standard minimum or design allowable.
License ID	CC-BY-4.0
License URL	https://creativecommons.org/licenses/by/4.0/
Attribution	Davor Skejic

Material Condition

Field	Value
Condition	EN AW-7108-T7 material-test certificate; one observation only
Temper	T7
Heat treatment	T7; detailed schedule not reported
Product form	not reported
Thickness / diameter range	not reported
Test direction	not reported
Processing route	material test certificate collected from the European aluminium market
Temperature range	Certificate/test temperature is not reported for this population; no temperature extrapolation is allowed.
Notes	one EN AW-7108-T7 material-test-certificate observation; product form, size and direction not reported. This is a single observation, not a population statistic, product-form value, standard minimum or design allowable.

Properties

Mechanical

Property	Value	Unit	Type	Applies to
Young's modulus	68.155	GPa	Single Certificate Observation Screening	one EN AW-7108-T7 material-test-certificate observation; product form, size and direction not reported

Statistics

Property	Value	Unit	Type	Applies to
Certificate sample count	1.0	count	Reported Population Size	one EN AW-7108-T7 material-test-certificate observation; product form, size and direction not reported

Engineering note: seed solid-material values are reference values only. Verify against the project material specification or supplier data sheet before release.