MATERIAL DATA SHEET

AA6463 annealed properties (CC BY secondary reference)

Secondary tabulated mechanical-property row for exact AA6463 in annealed condition.

Field	Value
Material ID	isrn-aa6463-annealed-secondary-properties
Category	Metal
Condition	AA6463 annealed condition; the source does not print an O temper designation, secondary review table | not stated
Unit system	Common SI
Unit contract	Material properties stored in SI engineering units.
Generated	2026-11-15 23:14

Source and Validity

Field	Value
Quality	Unknown
Design release allowed	No
Source family	peer_reviewed_open_article
Confidence	Unknown
License	Open
Source note	Exact-grade secondary AA6463 condition row from a CC BY 3.0 peer-reviewed review.
Citation	Prantik Mukhopadhyay, Alloy Designation, Processing, and Use of AA6XXX Series Aluminium Alloys, ISRN Metallurgy 2012, Article ID 165082, Table 10, printed page 12, https://doi.org/10.5402/2012/165082. CC BY 3.0. The property row is secondary data attributed by the review to reference [7].
Valid temperature	The property table does not state test temperature; no temperature extrapolation is allowed.
Valid pressure	Pressure dependence is not represented.
Valid phase / condition	AA6463 annealed condition; the source does not print an O temper designation, secondary review table
Uncertainty	Secondary values reproduced by a CC BY review from its reference [7]. The review gives no product form, size, direction, test temperature, test method, sample count, statistic or uncertainty for these property rows. The hardness heading is H.V while the printed unit row is HB, so PropLib preserves the inconsistency instead of choosing a hardness scale. These values are not current EN minima, supplier-certified values or design allowables.
Last reviewed	2026-08-03
Reviewer	scripts/import_isrn_aa6463_public.py

Field	Value
Review status	Checked
Review scope	Checked Crossref CC BY 3.0 metadata, DOI/article identity, exact AA6463 row, annealed/T6 condition labels, Table 9 processing temperatures, Tables 10-11 numeric values, printed units, secondary-reference status and missing form/test/statistical context.
Notes	Secondary values reproduced by a CC BY review from its reference [7]. The review gives no product form, size, direction, test temperature, test method, sample count, statistic or uncertainty for these property rows. The hardness heading is H.V while the printed unit row is HB, so PropLib preserves the inconsistency instead of choosing a hardness scale. These values are not current EN minima, supplier-certified values or design allowables.
License ID	CC-BY-3.0
License URL	https://creativecommons.org/licenses/by/3.0/
Attribution	Prantik Mukhopadhyay

Material Condition

Field	Value
Condition	AA6463 annealed condition; the source does not print an O temper designation, secondary review table
Temper	annealed condition; the source does not print an O temper designation
Heat treatment	Table 9 lists AA6463 annealing temperature 413 degC; time, cooling route and the connection between the Table 9 process row and the Table 10 property population are not stated
Product form	not stated
Thickness / diameter range	not stated
Test direction	not stated
Processing route	wrought AA6XXX context; exact product route for the tabulated property row is not stated
Temperature range	The property table does not state test temperature; no temperature extrapolation is allowed.
Notes	Secondary values reproduced by a CC BY review from its reference [7]. The review gives no product form, size, direction, test temperature, test method, sample count, statistic or uncertainty for these property rows. The hardness heading is H.V while the printed unit row is HB, so PropLib preserves the inconsistency instead of choosing a hardness scale. These values are not current EN minima, supplier-certified values or design allowables.

Properties

Mechanical

Property	Value	Unit	Type	Applies to
Tensile yield strength	50.0	MPa	Secondary Tabulated Reference Screening	exact AA6463 annealed condition; the source does not print an O temper designation row in Mukhopadhyay (2012) Table 10; product form, size, direction, test temperature, specimen count, statistic and test method are not stated
Ultimate tensile strength	88.0	MPa	Secondary Tabulated Reference Screening	exact AA6463 annealed condition; the source does not print an O temper designation row in Mukhopadhyay (2012) Table 10; product form, size, direction, test temperature, specimen count, statistic and test method are not stated
Elongation	23.0	%	Secondary Tabulated Reference Screening	exact AA6463 annealed condition; the source does not print an O temper designation row in Mukhopadhyay (2012) Table 10; product form, size, direction, test temperature, specimen count, statistic and test method are not stated
Shear strength	70.0	MPa	Secondary Tabulated Reference Screening	exact AA6463 annealed condition; the source does not print an O temper designation row in Mukhopadhyay (2012) Table 10; product form, size, direction, test temperature, specimen count, statistic and test method are not stated
Fracture strength	55.0	MPa	Secondary Tabulated Reference Screening	exact AA6463 annealed condition; the source does not print an O temper designation row in Mukhopadhyay (2012) Table 10; product form, size, direction, test temperature, specimen count, statistic and test method are not stated

Property	Value	Unit	Type	Applies to
Hardness (source heading H.V; printed unit HB)	25.0	HB (source-printed; heading conflict)	Secondary Tabulated Hardness Scale Conflict Screening	exact AA6463 annealed condition; the source does not print an O temper designation row in Mukhopadhyay (2012) Table 10; product form, size, direction, test temperature, specimen count, statistic and test method are not stated

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