Datasheet:

EN AW-7022
Sheet, strip & plate - Aluminium

Alumeco ApS
08-04-2025

Internal alloy name:	**7022**
Chemical Symbol:	**EN AW-Al Zn5Mg3Cu**
International alloy name:	**EN AW-7022**
UNS:	**A97022**
DIN-Werkstoff no.:	**3.4345**
Alloy type:	**Heat treatable alloy**

Main usage:

- Tool- and mouldmaking
- Drive technology
- Machinery and device construction
- Military and Aerospace

Main properties:

- Very high strength
- Great polishability
- Good machinability

Important norms and literature:

General Standards:
EN 573-3:2013: Aluminium and aluminium alloys – Chemical composistion and form of wrought products – Part 3: Chemical composition and form of products.

Product standards:
EN 485-2:2008: Aluminium and aluminium alloys – Sheet, strip and plate – Part 2: Mechanical properties.

Geometric Tolerance:
EN 485-3:2005: Aluminium and aluminium alloys – Sheet, strip and plate – Part 3: Tolerances on dimensions and form for hot-rolled products

EN 485-4:2000: Aluminium and aluminium alloys – Sheet, strip and plate – Part 4: Tolerances on shape and dimensions for cold-rolled products

Chemical composition in %: EN 573-3:2013

Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Remarks	Others Max.	
									Each	Total
Remainder	Max. 0,50	Max. 0,50	0,50 – 1,0	0,10 – 0,40	2,6 – 3,7	0,10 - 0,30	4,3 – 5,2	0,20 Ti+Zr	0,05	0,15

Mechanical properties: EN 485-2:2008

Temper	Specified thickness *t* mm	Tensile Stress R_m MPa	Proof Stress $R_{p0,2}$ MPa	Elongation Min. %		Hardness HBW
				A_{50mm}	A	
T6	3,0 ≤ *t* < 50	Min. 450	Min. 370	8	7 - 8	133
	50 ≤ *t* < 100	Min. 430	Min. 350	-	5	127
	100 ≤ *t* < 200	Min. 410	Min. 330	-	3	121
T651	3,0 ≤ *t* < 50	Min. 450	Min. 370	8	7 - 8	133
	50 ≤ *t* < 100	Min. 430	Min. 350	-	5	127
	100 ≤ *t* < 200	Min. 410	Min. 330	-	3	121

*** Information values only;**

Physical properties:

Density g/cm³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m^{-1} K^{-1})	Annealing temperature °C	E - modulus (N / mm²)
2,78	600 – 650	32 - 38	130 – 160	23,6	380 – 420	70000

Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)

Resistance:
Corrosion index, general: 1
Marine Atm. Corr index: 1

Hot workability:
Extrusion: 1
Forging: 1

Cold formability:
Cold formability general: 1
Deep drawing: 1
Bending: 1

Weldability
TIG welding: 1
MIG welding: 1

Solderability
Brazability index: 1
Solderability index: 1

Machinability
Machinability index: 2

Anodizing:
Decorative anodizing surface treatment: 1
Protective anodizing index: 3
Hard anodizing: 2
Color anodizing: 2