**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