

Data sheet

EN AW - 2024 based on DIN EN 573

AlCu4Mg1

Chemical composition: (ref.values/mass %)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Ti + Zr ¹⁾	other elements
0,50	0,50	3,8 – 4,90	0,30 – 0,9	1,2 – 1,8	0,10	0,25	0,15	0,20	single 0,05; total 0,15

¹⁾ by agreement

Mechanical properties: (ref.values DIN EN 586-2)

Cross-sectional dimension in mm ²	Temper (DIN EN 515)	Yield strength	Tensile strength	Elongation at break	Hardness HBW
		R _{p 0,2} (MPa)	R _m (MPa)	A (%)	2,5/62,5 Guide value
≤ 100	T 4	260	420	8	100

These are the minimum values according to the standard.

The following information applies to the above alloy

- Additional features:**

Weldability **Corrosion resistance**

Gas: 6 Seawater: 5
TIG: 6 Weather: 5
MIG: 6

- Delivery forms:**

Die forging or open die forging.

- Special material properties:**

Cold hardenable alloy with high mechanical strength.

- Application:**

Highly stressed construction elements for aerospace, automotive and mechanical engineering.

Notes:

- Cross-sectional dimensions: For larger cross-sections as specified above, the mechanical properties are basically to be determined per each component.
- Source specifications for flexural fatigue strength (www.alu-schlüssel.de).
- Corrosion+welding: Aluminium material data sheet. (evaluation scale: 1= excellent; 2= good; 3=acceptable; 4=inadequate; 5=not recommended; 6= unsuitable)
- All standards in the currently valid version.