

Data sheet

EN AW-2014 based on DIN EN 573

AlCu4SiMg

Chemical composition: (ref.values/mass %)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Ti + Zr ¹⁾	other elements
0,5 – 1,2	0,7	3,9 – 5,0	0,40 – 1,2	0,20 – 0,8	0,10	0,25	0,15	0,2	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 2,5/62,5 Guide value	Fatigue strength in MPa ³
		R _{p 0,2} (MPa)		R _m (MPa)		A (%)			
		T ¹⁾	L ²⁾	T	L	T	L		
≤ 100	T 6	360	370	430	440	3	6	120	145

T¹⁾ Transverse direction to the grain flow / L²⁾ Parallel to the grain flow // 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: 4

TIG: 6 Weather: 3

MIG: 6

- **Delivery forms:**

Die forging or open die forging.

- **Special material properties:**

Hot and cold hardenable alloy with very high strength properties, almost approaching those of AlZnMgCu materials in the artificially aged condition.

- **Application:**

Automotive and mechanical engineering, aerospace and defence technology.

Notes:

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