

Data sheet

EN AW – 6061 based on DIN EN 573

AlMg1SiCu

Chemical composition: (ref.values/mass %)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	other elements
0,40 - 0,8	0,7	0,15 – 0,40	0,15	0,8 – 1,2	0,04 – 0,35	0,25	0,15	single 0,05; total 0,15

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 Richtwert
		R_{p 0,2} (MPA)		R_m (MPA)		A (%)		
		T ¹⁾	L ²⁾	T	L	T	L	
≤ 100	T 6	100	240	190	300	4	6	80

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

- Additinal features:**

Weldability: Corrosion resistance

Gas: 3 Seawater: 2-3
TIG: 2 Weather: 2
MIG: 1

- Delivery forms:**

Die forging or open die forging.

- Special material proberities:**

Cold and hot hardenable alloy with very good strength.

- Application:**

Vehicle construction, mechanical engineering, building industry, decoratively anodisable and weldable.

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=accetable; 4=inadequate; 5=not recommended; 6= unsuitable)
4. All standards in the currently valid version.