

Data sheet

EN AW - 2618A based on DIN EN 573

AlCu2Mg1,5Ni

Chemical composition: (ref.values/mass %)

Si	Fe	Cu	Mn	Mg	Ni	Zn	Ti	Ti + Zr ¹⁾	other elements
0,15 – 0,25	0,90 – 1,40	1,80 – 2,70	0,25	1,20 – 1,80	0,80 – 1,40	0,15	0,20	0,25	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 61	300	370	380	420	3	8	130	120

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:

Gas: 2
TIG: 2
MIG: 2

- Delivery forms:**

Die forging or open die forging.

- Special properties:**

Hot hardenable alloy with very good strength properties up to 300°C.

- Application:**

Highly stressed construction elements for aerospace and mechanical engineering, turbine and engine construction, demanded for higher temperatures.

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.