

## 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 <sup>1)</sup>	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

<sup>1)</sup> by agreement

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

Cross-sectional dimension in mm <sup>2</sup>	Temper (DIN EN 515)	Yield strength		Tensile strength		Elongation at break		Hardness HBW 2,5/62,5 Guide value	Fatigue strength in MPa <sup>3</sup>
		R <sub>p 0,2</sub> (MPa)		R <sub>m</sub> (MPa)		A (%)			
		T <sup>1)</sup>	L <sup>2)</sup>	T	L	T	L		
≤ 100	T 61	300	370	380	420	3	8	130	120

T<sup>1)</sup> Transverse direction to the grain flow / L<sup>2)</sup> 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:**

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](http://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.