

Data sheet

EN AW - 7020 based on DIN EN 573

AlZn4,5Mg1

Chemical composition: (ref.values/mass %)

Si	Fe	Cu	Mn	Mg	Cr	Zn	other elements
0,35	0,4	0,20	0,05 – 0,5	1,0 – 1,4	0,10-0,35	4,0 – 5,0	single 0,05; total 0,15

Remark: Zr = 0,08 -0,20; Ti+Zr = 0,08 - 0,25

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
		R _{p 0,2} (MPa)		R _m (MPa)		A (%)		
		T ¹⁾	L ²⁾	T	L	T	L	
≤ 100	T 6	260	280	310	350	6	8	95

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: 3 Seawater: 4
TIG: 2 Weather: 3
MIG: 1

- Delivery forms:**

Die forging or open die forging.

- Special material properties:**

Cold and hot hardenable alloy with medium strength.
To prevent stress corrosion heat treatment after welding is required.

- Application:**

Vehicle and mechanical engineering. Particularly suitable for welded constructions.

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.