

Material data sheet

EN AW 7020 [EN AW-Al Zn4,5Mg1]

Compliance with the requirements of the EU directives RoHS 2011/65/EU and ELV 2000/53/EC

1) Chemical composition according to DIN EN 573-3 [% by mass, remainder Al]

%	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Remarks	Each
min.	-	-	-	0.05	1.0	0.10	-	4.0	-	0.08-0.2 Zr	-
max.	0.35	0.40	0.20	0.50	1.4	0.35	-	5.0	-	0.08-0.25 Zr+Ti	0.15

2) Mechanical properties according to DIN EN 754-2 drawn / DIN EN 755-2 extruded

Temper	Dimensions in mm		R _m Mpa		R _{p0,2}		A%	A _{50mm} %	HBW
	D ^a	S ^b	min.	max.	min.	max.	min.	min.	Typical value
T6	≤80	≤50	350	-	280	-	10	8	110
T6^c	≤50	≤50	350	-	290	-	10	8	110
	50<D≤200	50<S≤200	340	-	275	-	10	-	110

D^a = Diameter for round rod / S^b = Width across flat for square and hexagonal rod, Thickness for rectangular rod / c Properties may be obtained by press quenching.

Classification: 1=very good / 6=insufficient

Physical properties		General properties			
Dichte g/cm ³	2.77	Corrosion resistance to atmospheric influences	3	Surface treatment	2
Elastizitätsmodul MPa	70000				
Wärmeleitfähigkeit W/(m K)	130-160	Decorative anodizing	3		
Wärmeausdehnung (20-100 °) 10 ⁻⁶ /K	23.1			Painting/Coating	2
Elektrische Leitfähigkeit MS/m	19-23	Brazeability:			
		Brazing with flux	6		
		Brazing without flux	6		
		Friction soldering	3		
		Soft soldering with flux	6		
Weldability		Machining properties			
Gas	3	Annealed			3
TIG	2	Work hardened			-
MIG	1	Precipitation hardened			2
Resistance fusion welding	6	Cutting speed v=m/min			-
		Chip shape			-

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