

Material data sheet

EN AW 7075 [EN AW-Al Zn5.5MgCu]

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	Comment	Each
min.	-	-	1.2	-	2.1	0.18	-	5.1	-	Ti + Zr max. 0,25	-
max.	0.40	0.50	2.0	0.30	2.9	0.28	-	6.1	0.20		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} MPa		A%	A _{50mm} %	HBW
	D ^a	S ^b	min.	max.	min.	max.	min.	min.	Typical value
T6	≤80	≤80	540	-	485	-	7	6	150
T6/T6510	≤25	≤25	540	-	480	-	7	5	150
T6511	25 <D≤100	25 <S≤100	560	-	500	-	7	-	150
	100 <D≤150	100 <S≤150	530	-	470	-	6	-	150
	150 <D≤200	150 <S≤200	470	-	400	-	5	-	150

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			
Density g/cm ³	2.80	Corrosion resistance to atmospheric influences 4/5 seawater 4/5 Brazeability: Brazing with flux 6 Brazing without flux 6 Friction soldering 6 Soft soldering with flux 6	Surface treatment Protection anodizing 3 Decorative anodizing 6 Painting/Coating 3		
Modulus of elasticity MPa	72000				
Thermal conductivity W/(m K)	130-160				
Coefficient of thermal expansion (20-100 °) 10 ⁻⁶ /K	23.4				
Electrical conductivity MS/m	19-23				
Weldability		Machining properties			
Gas-	6	Annealed			-
TIG-	6	Work hardened			-
MIG-	6	Precipitation hardened			2
Resistance fusion welding	2	Cutting speed v=m/min			300-800
		Chip shape			Scales/ spirals

Errors and changes excepted/This document is not subject to revision.