

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 485-2

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	6,0	12,5	540	-	460	-	-	8	160
T651	12,5	25,0	540	-	470	-	6	-	161
T62	25,0	50,0	530	-	460	-	5	-	158
	50,0	60,0	525	-	440	-	4	-	155
	60,0	80,0	495	-	420	-	4	-	147
	80,0	90,0	490	-	390	-	4	-	144
	90,0	100,0	460	-	360	-	3	-	135
	100,0	120,0	410	-	300	-	2	-	119
	120,0	150,0	360	-	260	-	2	-	104
	150,0	200,0	360	-	240	-	2	-	-
	200,0	300,0	360	-	240	-	1	-	-

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 seawater	4/5 4/5	Surface treatment Protection anodizing Decorative anodizing Painting/Coating	3 6 3
Modulus of elasticity MPa	72000				
Thermal conductivity W/(m K)	130-160	Brazeability: Brazing with flux Brazing without flux Friction soldering Soft soldering with flux	6 6 6 6		
Coefficient of thermal expansion (20-100 °) 10 ⁻⁶ /K	23.4				
Electrical conductivity MS/m	19-23				
Weldability		Machining properties			
Gas-	6	Bending		4(O)	
TIG-	6	Spinning		6	
MIG-	6	Deep drawing up to (temper)		6	
Resistance fusion welding	2				

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