

Material data sheet

EN AW-6060 [EN AW-Al MgSi]

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	Bi	Pb	Each
min.	0.30	0.10	-	-	0.35	-	-	-	-	-	-	-
max.	0.6	0.30	0.10	0.10	0.6	0.05	-	0.15	0.10	-	-	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% min.	A _{50mm} %	HBW
	D ^a	S ^b	min.	max.	min.	max.	min.	min.	Typical value
T6^c	≤ 80	≤ 80	215	-	160	-	12	10	75
T6^c	≤150	≤150	190	-	150	-	8	6	70

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	2.70	Corrosion resistance to atmospheric influences seawater	1	Surface treatment Protection anodizing Decorative anodizing Painting/Coating	1 EQ:1 1
Modulus of elasticity MPa	69500				
Thermal conductivity W/(m K)	200-220	Brazeability: Brazing with flux Brazing without flux Friction soldering Soft soldering with flux	2 1 1 2		
Coefficient of thermal expansion (20-100 °) 10 ⁻⁶ /K	23.4				
Electrical conductivity MS/m	34-38				
Weldability		Machining properties			
Gas	3	Annealed Work hardened Precipitation hardened Cutting speed v=m/min Chip shape			3
TIG	2				-
MIG	2				2
Resistance fusion welding	-				400-800 Spirals

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