

Material data sheet

EN AW-6026 LF unleaded free-cutting quality

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	Zn	Cr	Ti	Bi	Pb	Sn	Each
min.	0.6	-	0.20	0.20	0.60	-	-	-	0.50	0	0	-
max.	1.40	0.70	0.50	1.00	1.20	0.30	0.30	0.20	1.50	0,05	0,05	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	370	-	300	-	8	6	95
T8	≤80	≤60	345	-	315	-	4	3	95
T9	≤80	≤60	360	-	330	-	4	3	95
T6,T6510	≤140	≤140	370	-	300	-	8	6	95
T6511	140<D≤200	140<S≤200	340	-	250	-	8	6	90
	200<D≤250	200<S≤250	300	-	200	-	8	6	90

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	2.72	Corrosion resistance to atmospheric influences 2 seawater 3	Surface treatment Protection anodizing 2 Decorative anodizing 2 Hard anodising 1	k.A.	k.A.
Modulus of elasticity MPa	69000				
Thermal conductivity W/(m K)	172	Brazeability: Brazing with flux k.A. Brazing without flux k.A. Friction soldering k.A. Soft soldering with flux k.A.	k.A.	k.A.	k.A.
Coefficient of thermal expansion (20-100 °) 10 ⁻⁶ /K	23.4				
Electrical conductivity MS/m	26				
Weldability		Machining properties			
Gas	k.A.	Annealed		-	
TIG	k.A.	Work hardened		-	
MIG	2	Precipitation hardened		2	
Resistance fusion welding	2	Excellent machinability, low tool wear, shiny surface			

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