

# Material data sheet

## EN AW-2014A [EN AW-Al Cu4SiMg]

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
<b>min.</b>	0.50	-	3.9	0.40	0.20	-	-	-	-	-	-
<b>max.</b>	0.9	0.50	5.0	1.2	0.8	0.10	0.10	0.25	0.15	0.20 Zr + Ti	0.15

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

Temper	Dimensions in mm		R <sub>m</sub> MPa		R <sub>p0,2</sub> MPa		A%	A <sub>50mm</sub> %	HBW
	D <sup>a</sup>	S <sup>b</sup>	min.	max.	min.	max.	min.	min.	Typical value
<b>T3</b>	≤80	≤80	380	-	290	-	8	6	110
<b>T6</b>	≤80	≤80	450	-	380	-	8	6	140
<b>T6</b>	≤25	≤25	415	-	370	-	6	5	140
	25<D≤75	25<S≤75	460	-	415	-	7	-	140
	75<D≤150	75<S≤150	465	-	420	-	7	-	140
	150<D≤200	150<S≤200	430	-	350	-	6	-	140
	200<D≤250	200<S≤250	420	-	320	-	5	-	140

D<sup>a</sup> = Diameter for round rod / S<sup>b</sup> = 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 <sup>3</sup>	2,80	<b>Corrosion resistance to atmospheric influences seawater</b>  <b>Brazeability:</b> Brazing with flux Brazing without flux Friction soldering Soft soldering with flux	3 4  6 6 3 6	<b>Surface treatment</b> Protection anodizing Decorative anodizing Painting/Coating	3 6 3
Modulus of elasticity MPa	73000				
Thermal conductivity W/(m K)	140-200				
Coefficient of thermal expansion (20-100 °) 10 <sup>-6</sup> /K	22,8				
Electrical conductivity MS/m	21-24				
Weldability		Machining properties			
Gas	6	Annealed		4	
TIG	6	Work hardened		-	
MIG	6	Precipitation hardened		2	
Resistance fusion welding	2	Cutting speed v=m/min		-	
		Chip shape		-	

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