



### Aluminium 2024 (EN AW 2024 AlCu4Mg1) According to EU directives: 2000/53/CE (ELV) - 2011/65/CE (RoHS II)

- Aluminium-copper alloy.
- This alloy is used in aeronautics with good machinability excellent to sustain effort and high temperature.

		THICKNESS							
		1,5≤3	3≤6	6≤12,5	12,5≤40	40≤80	80≤100	100≤120	120≤150
<b>Physical state</b>		T3 - T351							
<b>Mechanical properties</b>									
Ultimate tensile strenght Rm[N/mm <sup>2</sup> ]	minimal	435	440	440	430	420	400	380	360
Yield strenght Rp 0,2	minimal	290	290	280	290	290	285	270	250
Elongation As	minimal	14	14	13	11	8	7	5	5
Hardness Brinell HB (information only)	minimal	123	124	124	122	120	115	110	104
<b>Physical properties</b>									
Density [kg/dm <sup>3</sup> ]		2,78							
Module of elasticity [Gpa]		72							
Electrical conductivity at 20 °C [m/Ω-mm <sup>2</sup> ]		57							
Coefficient of thermal expansion [10 <sup>-6</sup> /K]		23,1							
Thermal conductivity [w/m.K]		121							
Melting point range °C		500 ÷ 640							
<b>Processing characteristics</b>									
Machinability		++++							
Dimensional stability		++++							
Erodability		++++							
Weldability		+							
Polishability		+++++							
Anodizing decorative		+++							
Anodizing hard		+							
Corrosion resistance (weather)		+++							
Corrosion resistance (seawater)		+							

#### Legend - Processing Characteristics

Excellent +++++      Good ++++      Accettable +++      Mediocre ++      Inadequate +      Not suitable -

#### CHEMICAL COMPOSITION

DENOMINATION	Si	Fe	Mn	Mg	Cu	Zn	Cr	Ti	Ni	Pb	Bi	V	Others	IMPURITY	ALUMINIUM
2024	≤0,50	≤0,50	0,30-0,90	1,20-1,80	3,80-4,90	≤0,25	≤0,10	≤0,15						0,05	0,15 remainder