# SERIES 1000 (AL 99,5)

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The aluminum alloy AW1050 has high resistance to corrosion, high flexibility, high thermal and electrical conductivity and low mechanical resistance. This alloy is especially suitable for bending.

# CHEMICAL COMPOSITION (WEIGHT %) (EN 573 - 3)

ELEMENTS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Minimum	-	-	-	-	-	-	-	-	99.5
Maximum	0.25	0.4	0.05	0.05	0.05	-	0.07	0.05	-

### **MECHANICAL PROPERTIES (EN 485 - 2)**

TEMPER	THICKNESS	Rm (MPa)		Rp0.2*	A50	HB - BRINELL
	(mm)	min.	max.	(MPa)	(%)	HARDNESS
H111 e H24	0.3 - 20	105	145	75	3-8	33

\*Minimum values.



#### **MAIN CHARACTERISTICS**

- Low mechanical strength
- Excellent resistance to corrosion
- High thermal and electrical conductivity
- Good formability
- Good weldability
- High reflectivity



#### APPLICATIONS

- Electric sector
- Pharmaceutical industry
- Chemical and food industry
- Automobile industry
- Architecture and construction
- Signaling







ABILITY



All figures given are indicative only, Polylanema Lda. is not liable for the use of the materials without consulting with our technical department.

# SERIES 1000 PHYSICAL PROPERTIES

DENSITY	2.70 g/cm <sup>3</sup>
MODULUS OF ELASTICITY	69 000 MPa
LINEAR EXPANSION COEFFICIENT	23.5 10-6
THERMAL CONDUCTIVITY	229 W/mK
ELECTRICAL CONDUCTIVITY	29 n <b>Ω</b> .m

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## **DELIVERY PROGRAM**

PLATES		
THICKNESS (mm)	DIMENSIONS (mm)	STOCK H111 and H24
0,3 - 20,0	1000 x 2000 mm	•
0,3 - 20,0	1250 x 2500 mm	0
0,3 - 20,0	1500 x 3000 mm	۵