



**ANODALL
EXTRUSION**

estrusione e lavorazione alluminio

ALLOY EN AW – 6063

CHEMICAL CHARACTERISTICS	Numerical designation	EN AW – 6063
	Chemical description	EN AW – AlMg0,7Si
	Aluminium Association	AA 6060

CHEMICAL COMPOSITION % in weight, reference UNI EN 573-3	Silicon Si	0,20 – 0,60
	Iron Fe	0,35 max
	Copper Cu	0,10 max
	Manganese Mn	0,10 max
	Magnesium Mg	0,45 – 0,90
	Chromium Cr	0,10 max
	Zinc Zn	0,10 max
	Titanium Ti	0,10 max
	Others	Each 0,05
		Total 0,15
Aluminium	REST	

MECHANICAL CHARACTERISTICS reference UNI EN 755-2*	Hardening	T4	T5	T6	T64	T66
	Thickness (mm)	≤ 25	≤ 3	≤ 10	≤ 15	≤ 10
	Rm (MPa) min.	130	175	215	180	245
	Rp0,2 (MPa) min.	65	130	170	120	200
	A % min.	14	8	8	12	8
	A50 mm % min.	12	6	6	10	6
	HBW (Brinell) - typical	50	65	75	65	80

*These values are intended for extruded profiles

PHYSICAL CHARACTERISTICS	Density (kg/dm ³)	2,7
	Melting point (°C)	600/655
	Coefficient of Poisson	0,33
	Modulus of elasticity (MPa)	69.000
	Modulus of tangential elasticity (MPa)	26.000
	Coeff. of linear thermal expansion from 20-100°C (10 ⁻⁶ K ⁻¹)	23,2
	Thermal conductivity at 20°C (W/cm x K)	2,09
	Specific Heat from 0 to 100°C [j/kg x °K]	897

TECHNOLOGICAL CHARACTERISTICS	Hardening	T4	T5	T6	T64	T66
	Attitude to anodization	E	E	E	E	E
	Resistance to corrosion	G	G	G	G	G
	Cold plastic workability	G	S	S	G	U
	Machinability	U	S	G	S	G
	Weldability	G	G	G	G	G
	Mouldability	E	E	E	E	E

U = unsatisfying, S = satisfying, G = good, E = excellent

Direct extrusion alloy with mechanical characteristics lightly higher than alloy EN AW – 6060. It's typically used for buildings, furnishing and automotive.

Products extruded with this alloy are suited for different surface treatments like powder coating and anodizing, this last one with high quality results.