

## ALLUMINIO EN-AW 6060

La lega di alluminio 6060 è una lega a media resistenza con un livello leggermente più basso rispetto alla lega 6005A. Ha un'ottima resistenza alla corrosione, ottima saldabilità e buona resistenza alle basse temperature. È comunemente usata per realizzare elementi anche con forma complessa e risulta molto buona nei processi di anodizzazione.

Alloy	Forms	Characteristics - Properties	Applications
EN - AW 6060	• Extruded round rod/bar	• Very good corrosion resistance • Medium strength • Complex sections • Anodising quality	Architectural sections, frames, lightings, railing, ladders, furniture, fences, flooring

Alloy	Temper	Temper designation (EN 515)
EN - AW 6060	O	Annealed wrought alloys
	T4	Solution heat treated & natural aged
	T5	Cooled from an elevated temperature forming operation & artificially aged (precipitation hardened)
	T6	Solution heat treated & artificially aged (precipitation hardened) Press quenching required
	T64	Solution heat treated & artificially aged (precipitation hardened) Under aged to improve formability (bending temper)
	T66	Cooled from an elevated temperature forming operation & artificially aged (precipitation hardened) to a higher level of mechanical properties through special control of manufacturing processes. Press quenching required.

Aluminium & aluminium alloys Extruded rod/bar, tubes and precision profiles	
EN 755-1	Technical conditions for inspection & delivery
EN 755-2	Mechanical properties
EN 755-3	Round bars, tolerances on dimension & form
EN 755-4	Square bars, tolerances on dimension & form
EN 755-5	Rectangular bars, tolerances on dimension & form
EN 755-6	Hexagonal bars, tolerances on dimension & form
EN 755-7	Seamless tubes, tolerances on dimension & form
EN 755-9	Profiles, tolerances on dimension & form
EN- 12020-1	Technical conditions for inspection & delivery (precision profiles)
EN- 12020-2	Tolerances on dimension & form (precision profiles)

Physical properties	
Alloys EN - AW	6060
Metalic range °C	585-650
Density g/cm <sup>3</sup>	2,70
Electrical conductivity MS/m	34-38
Thermal conductivity W/(m K)	200-220
Specific Heat J/(Kg K)	898
Thermal expansion values	
-50 to 20 °C (10° K)	21,8
20 to 100 °C (10° K)	23,4
20 to 200 °C (10° K)	24,5
20 to 300 °C (10° K)	25,6
YoungsModulusMpa	69500
Shear ModulusMpa	26100

### Chemical composition according to EN573-3 (EN - AW %)

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Al
									Each	Total	
6060	0,30-0,60	0,10-0,30	0,10	0,10	0,35-0,60	0,05	0,15	0,10	0,05	0,15	Rest

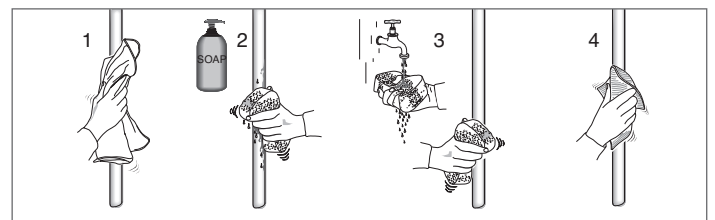
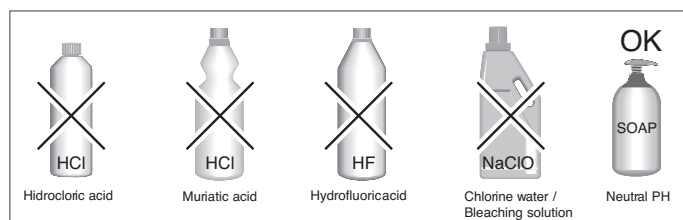
### Mechanical properties according to EN 755-2 extruded profiles

Alloy	Temper	Wall Thickness e mm*	Tensile strength Rm Mpa min	Proof stress Rpo,2 Mpa min	Elongation		Brinell Hardness HB**
					A50mm % min	A % min	
EN - AW 6060	T4	e ≤ 25	120	60	14	16	45
	T5	e ≤ 5	160	120	6	8	55
	T6	e ≤ 3	190	150	6	8	65
		3 < e ≤ 25	170	140	6	8	60
	T66	e ≤ 3	215	160	6	8	70
		3 < e ≤ 25	195	150	6	8	65



\* For different wall thicknesses of a given profile, the lowest specified values of properties shall be considered as valid for the whole profile cross-section.

\*\* The values for the HB hardness are indicative only.

### PULIZIA



\* colori indicativi

MATERIALE	FINITURA	.XX	*
ALLUMINIO	Di produzione:		
	ALLUMINIO	Bronzo	.67 
	ANODIZZATO	Nero	.68 
	SATINATO	Argento	.69 