

PROPERTY OF ALUMINIUM - 6061 T6

6061 (AW-AMg1S1Cu)

Chemical Properties (EN 573-1)	UNIT WT %
Silicon (Si)	0,4 ~ 0,8
Iron (Fe)	Max 0,7
Copper (Cu)	0,15 ~ 0,4
Manganese (Mn)	Max 0,15
Magnesium (Mg)	0,8 ~ 1,2
Chrome (Cr)	0,04 ~ 0,35
Zinc (Zn)	Max 0,25
Titanium(Ti)	Max 0,15
Others	0,15
Aluminium (Al)	Rest (98)

EXTRUDED PROFILES - (according to standard EN 755-2)

ETAT	DIMENSIONS	Rm (Mpa)	Rp0,2 (Mpa)	A %	A 50%
	mm	mini	mini	mini	mini
T6	5 < e ≤ 25	260	240	10	8

PHYSICAL AND ELASTICAL PROPERTIES

ETAT	Elastic			Physical							
	E	G	v	T _{sol}	T _{liq}	C _p	α	P	P _{el}	λ	EC
	Mpa	Mpa	-	°C	°C	J kg ⁻¹ K ⁻¹	μm m ⁻¹ K ⁻¹	kg m ⁻³	nΩ m	W m ⁻¹ K ⁻¹	%IACS
T6	70000	26300	0,33	580	650	895	23,3	2700	40	166	43

LEGEND

E	Elasticity Modulus	Mpa
G	Shear Modulus	Mpa
v	Poisson's Ratio	-
T _{sol}	Solidus	°C
T _{liq}	Liquidus	°C
C _p	Heat Capacity	J kg ⁻¹ K ⁻¹
α	Thermal Expansion Coefficient	μm m ⁻¹ K ⁻¹
P	Density	kg m ⁻³
P _{el}	Resistivity	nΩ m
λ	Thermal Conductivity	W m ⁻¹ K ⁻¹
EC	Electical Conductivity	%IACS

Rm	Tensile Strength	Mpa
Rp0,2	Yield Strength	Mpa
A%	Elongation at break	%

