

**Chemical Composition Limits (in %)**

Cu	Mg	Si	Fe	Mn	Zn	Ti	Cr	Other elements	
								Each	Total
0,1	0,45 0,9	0,2 0,6	0,35	0,1	0,1	0,1	0,1	0,05	0,1

**Outstanding Characteristics:**

Medium strength alloy suitable for intricate extrusions. High corrosion resistance. Good formability in T4 condition. Good surface finish.

**Standard Commodities:**

Extrusion ingot; extrusions.

**Typical Uses:**

Architectural members such as window frames and glazing bars; irrigation tubing.

**Typical Physical Properties**

Density	2,71	g/cm <sup>3</sup>
Modulus of Elasticity	67	GPa
Modulus of Rigidity	25,5	GPa
Melting Range	600-650	°C
Specific heat between 0-100°C (273-373 K)	0,88	
Coefficient of linear expansion between 20-200°C (293-473K)	23 x 10 <sup>-6</sup>	/K
Thermal Conductivity at 100°C (373K)	180-218	W/mK
Resistivity at 20°C (293 K)	0,035 x 10 <sup>-6</sup>	Ωm

**Other Characteristics**

Corrosion Resistance	:	Very Good
Weldability	:	Good
Formability	:	Good (in T4 temper)
Anodising	:	Very Good
Brazeability	:	Good

**Mechanical Properties**

Commodity & Temper	Gauge mm	0,2% Proof Stress MPa	Ultimate Tensile Strength MPa	Elongation A5 %	Brinell Hardness HB	Ultimate Shear Strength MPa
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**Extrusions**

O	up to 75		140	13
F	up to 75		100 (165)	12 (20)
T4	up to 75	70 (115)	130 (175)	14 (20)
T5	up to 25	110 (205)	150 (235)	7 (12)
T6	up to 75	160 (250)	185 (245)	7 (13)
T3	up to 10	100 (195)	155 (235)	15
T8	up to 10	180 (220)	200 (240)	8

**Heat Treatment****Solution Heat Treatment**

Temper	Temperature °C	Time h	Quenching	Ageing Temperature °C	Time h
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T6	520 ± 5		In water	170 ± 3	10
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Solution heat treatment of extrusions is attained by air quenching to 200°C at a minimum rate of 50°C/minute after extrusion.

**Annealing**

Temperature °C	Time h	
340-360	2*	To soften fully
340-360	2**	To soften partially

\* Cool not faster than 150C/hour to 250oC and withdraw from furnace. \*\* Cool in still air and form as soon as possible after annealing. Some degree of solution heat treatment/natural ageing will occur.