Alloy 6463

PROPERTIES AND SPECIFICATIONS:

CHEMICAL COMPOSITION % (1)											
Alloy	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others Each	Others Total
6463	Rem.	0.20 -0.60	0.15	0.25	0.05	0.30 -0.90	-	0.05	-	0.05	0.15

Temper	Size or Thickness (3)		Mechanical Property Compliance or Rating (2)			Typical Mecanical Properties, Characteristics and Applications				
			Tensile Strength (Mpa)		(5)	Tensile Strength (MPa)				
	Over mm	Up to mm	UTS (Min)	Yield (Min) (4)	Elong .% (min)	UTS	Yield	Elong .%	Shear (MPa)	Hardness (Hv)
T5		12	150	110	8	165	120	12	117	65
T52		12	150-205	110	8	160	120	12	110	62
T6		3	205	170	8	225	185	12	152	75
	3	12	205	170	10	225	185	12	152	75

Modulus of Elasticity (Gpa): [All Tempers] • Tension • Compression • Shear	 ~ 69 ~ 69 ~ 26	
Resistance to Corrosion: • General • Stress Corrosion Cracking	(6) A A	Good resistance to corrosion without protection.
Workability (Cold)	C	Average
Machinability	C	Average
Weldability • Gas • Arc • Resistance, Spot & Seam	 A A A	Generally weldable by all commercial procedures and methods.
Brazeability	A	Generally weldable by all commercial procedures and methods.
Typical Applications		Bright anodised architectural, appliance and automotive trim extrusions requiring a decorative finish.

Notes:

1) Chemical compositions are referenced in AS/NZS 1866. Single figures are maximums.
2) Mechanical properties and ratings for T5 & T6 tempers are specified in AS/NZS 1866. T52 Temper is not listed in AS/NZS 1866.
3) Thickness is defined as the diameter of solid rod or the wall thickness or the equivalent major solid cross section.
4) Yield is based on 0.2% Proof Stress.
5) Elongation is based on 50mm test parameter.
6) Ratings A through E are relative ratings in order of merit for the hardest temper (A = Excellent E = Poor).

Consult McKechnie Aluminium Technical Services Department if further information is required.