



## BRIEF DESCRIPTION

Low strength; high corrosion resistance; high thermal and electrical conductivity; easy to form; easy to weld. Well suited to applications where surface characteristics are important such as chemical brightening and anodizing. Typical applications include; chemical, pharmaceutical and food industries, containers, appliances, foil, closures etc.

## PROPERTIES

### Chemical Composition

	Si %	Fe %	Cu %	Mn %	Mg %	Cr %	Zn %	Ni %	Ti %
Max	0.25	0.40	0.05	0.05	0.05	-	0.07	-	0.05
Min									

Tolerances to EN 573-3 : 1994  
 Note Aluminium Content (by difference to be 99.50% Minimum)

## PROCESSING METHODS

### Weldability :

TIG/MIG - excellent  
 Resistance - good to excellent

### Anodising Response :

Protective - excellent  
 Decorative - excellent in softer tempers

### Forming :

Hot bending - excellent, though local softening would be expected in any temper other than soft.  
 Cold bending - high at quarter hard, fair above (see bend radii)  
 Deep draw - high up to quarter hard, not generally done in harder tempers  
 Spinning - high up to quarter hard, not generally done in harder tempers

### Machinability :

Moderate to poor

## CORROSION BEHAVIOUR

Excellent under normal weather conditions and in industrial and marine applications.

## TYPICAL PHYSICAL PROPERTIES

Density : 2.71 g/cm<sup>3</sup>  
 Modulus of elasticity : 69,000 N/mm<sup>2</sup>  
 Coefficient of linear thermal expansion (20-100°C) : 23.6 x 10<sup>-6</sup> K<sup>-1</sup>  
 Thermal conductivity : 210-230 W/mK  
 Specific electrical conductivity : 34-36 m/Ωmm<sup>2</sup> @ 20°C  
 Melting Range : 645-657 °C

### Tensile Properties

Temper	Gauge (mm)		0.2 % Proof Stress Min. N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>		Elongation on 50 mm %
	Over	Upto		Min	Max	
O	0.2	0.5	20	65	95	20
	0.5	1.5				22
	1.5	3				26
H12	0.2	0.5	65	85	125	2
	0.5	1.5				4
	1.5	3				5
H14	0.2	0.5	85	105	145	2
	0.5	1.5				3
	1.5	3				4
H24	0.2	0.5	75	105	145	2
	0.5	1.5				3
	1.5	3				5
H16	0.2	0.5	100	120	160	1
	0.5	1.5				2
	1.5	4				3
H18	0.2	0.5	120	140		1
	0.5	1.5				2
	1.5	3				2

Tolerances to EN 485-2 : 1994

### Minimum Recommended 90° Bend Radii

Temper	Max. Material Thickness (mm)		
	0.5	1.5	3
O	0t	0t	0t
H12	0t	0t	0.5t
H14	0t	0.5t	1.0t
H24	0t	.5t	1t
H16	0.5t	1.0t	1.5t*
H18	1.0t	2.0t	3.0t

\*: Max thickness = 4mm

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