



## Aluminium Alloy - 3103 H14 Sheet

### SPECIFICATIONS

Commercial	3103
EN	3103

Aluminium alloy 3103 H14

### CHEMICAL COMPOSITION

BS EN 573-3:2009 Alloy 3103	
Element	% Present
Manganese (Mn)	0.9 - 1.5
Iron (Fe)	0.7 max
Silicon (Si)	0.5 max
Magnesium (Mg)	0.3 max
Zinc (Zn)	0.2 max
Others (Total)	0.15 max
Copper (Cu)	0.1 max
Chromium (Cr)	0.1 max
Titanium + Zirconium (Ti+Zr)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

### ALLOY DESIGNATIONS

Aluminium alloy 3103 corresponds to the following standard designations and specifications **but may not be a direct equivalent:**

ISO Al Mn1

### TEMPER TYPES

The most common tempers for 3103 aluminium are:

- H14 - Work hardened by rolling to half hard, not annealed after rolling

### SUPPLIED FORMS

Alloy 3103-H14 is normally supplied as Sheet

- Sheet

### GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.73 g/cm <sup>3</sup>
Melting Point	655 °C
Thermal Expansion	23.1 x10 <sup>-6</sup> /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	160 W/m.K
Electrical Resistivity	42 % IACS

### MECHANICAL PROPERTIES

BS EN 485-2:2008 Sheet 0.2mm to 6.0mm	
Property	Value
Proof Stress	120 Min MPa
Tensile Strength	140 - 180 MPa
Hardness Brinell	45 HB

*Properties above are for material in the H14 condition*

### WELDABILITY

Alloy 3103 has very good weldability

### FABRICATION

Workability – Cold: Good  
 Machinability: Acceptable  
 Weldability – Gas: Very Good  
 Weldability – Arc: Very Good  
 Weldability – Resistance: Good  
 Brazability: Very Good  
 Solderability: Very Good



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### CONTACT

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### REVISION HISTORY

Datasheet Updated	13 November 2018
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