

## SPECIFICATIONS

Commercial	3103
EN	3103

Aluminium alloy 3103 H14

## CHEMICAL COMPOSITION

BS EN 573-3:2009 Alloy 3103	
Element	% Present
Manganese (Mn)	0.90 - 1.50
Iron (Fe)	0.0 - 0.70
Silicon (Si)	0.0 - 0.50
Magnesium (Mg)	0.0 - 0.30
Zinc (Zn)	0.0 - 0.20
Others (Total)	0.0 - 0.15
Chromium (Cr)	0.0 - 0.10
Copper (Cu)	0.0 - 0.10
Titanium + Zirconium (Ti+Zr)	0.0 - 0.10
Other (Each)	0.0 - 0.05
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

## CONTACT

<b>Address:</b>	Please make contact directly with your local service centre, which can be found via the Locations page of our web site
<b>Web:</b>	<a href="http://www.aalco.co.uk">www.aalco.co.uk</a>

## REVISION HISTORY

<b>Datasheet Updated</b>	13 November 2018
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