

# Aluminium Alloy 6L17 'O' Sheet



## SPECIFICATIONS

|            |      |
|------------|------|
| Commercial | 1200 |
|------------|------|

6L17 - 1200 is a commercially pure aluminium sheet that may be clad with alloy 7072 for better protection against stress corrosion cracking.

## CHEMICAL COMPOSITION

| BS 6L17(1985)<br>Alloy 6L17 |           |
|-----------------------------|-----------|
| Element                     | % Present |
| Aluminium (Al)              | 99 min    |
| Silicon + Iron (Si+Fe)      | 1 max     |
| Others (Total)              | 0.15 max  |
| Zinc (Zn)                   | 0.1 max   |
| Titanium (Ti)               | 0.05 max  |
| Other (Each)                | 0.05 max  |
| Manganese (Mn)              | 0.05 max  |
| Copper (Cu)                 | 0.05 max  |

The material shall be supplied cold rolled and annealed (Condition O).

No heat treatment is required.

## ALLOY DESIGNATIONS

Aluminium alloy 6L17 - 1200 is covered by Standard BS EN 6L17 (1985)

## TEMPER TYPES

The most common temper for 6L17 - 1200 aluminium are:

- O - Soft

## SUPPLIED FORMS

6L17 - 1200 aluminium is supplied as soft sheet and strip

- Sheet
- Strip

## GENERIC PHYSICAL PROPERTIES

| Property               | Value                     |
|------------------------|---------------------------|
| Density                | 2.59 g/cm <sup>3</sup>    |
| Melting Point          | 657 °C                    |
| Thermal Expansion      | 23.4 x10 <sup>-6</sup> /K |
| Modulus of Elasticity  | 69 GPa                    |
| Thermal Conductivity   | 225 W/m.K                 |
| Electrical Resistivity | 58.5 % IACS               |

## MECHANICAL PROPERTIES

| BS 6L17(1985)<br>Sheet<br>0.4mm to 0.8mm |                      |
|--|----------------------|
| Property                                 | Value                |
| Proof Stress                             | 25 Min MPa           |
| Tensile Strength                         | 70 Min - 105 Max MPa |
| Elongation A50 mm                        | 20 Min %             |

The specification covers sheet and strip of 99% aluminium.

The elongation value shown in the mechanical properties table apply to material with nominal thickness 0.4mm up to and including 0.8mm.

Different values for additional nominal thicknesses are shown in the specification.

## CONTACT

|          |   |
|----------|---|
| Address: | Gould Alloys Ltd<br>Markham Lane<br>Markham Vale<br>Chesterfield<br>S44 5HS<br>United Kingdom |
| Tel:     | +44 (0) 1246 263300   |
| Email:   | <a href="mailto:sales@gouldalloys.co.uk">sales@gouldalloys.co.uk</a>                          |
| Web:     | <a href="http://www.gouldalloys.co.uk">www.gouldalloys.co.uk</a>                              |

## REVISION HISTORY

|                   |                 |
|-------------------|-----------------|
| Datasheet Updated | 07 January 2014 |
|-------------------|-----------------|

## DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.