# Aluminium Alloy 6262 - T6 Extrusions



#### **SPECIFICATIONS**

Commercial	6262
EN	6262

Aluminium alloy 6262 is a heat treatable alloy with very good corrosion resistance and strength. Additions of bismuth to the alloy mean that 6262 has excellent machinability and surface finish.

High-speed steel or carbide tooling can be used to obtain smooth finishes. Heavy cutting requires oil lubricant but light cutting can be done dry.

Alloy 6262 can be used in place of 2011 when higher corrosion resistance and better anodising response is required.

**Applications** 

6262 is commonly used in the manufacture of:

Screw machine products

Camera parts

Nuts

Couplings

Marine fittings

Decorative hardware and appliance fittings

Hinge pins

Oil line fittings

Valves and valve parts

PLEASE NOTE: Due to European Environmental Protection Directives:

# 2000/53/CE-ELV - For the automotive sector

# 2002/95/CE-RoHS – For the electrical and electronics sector

This alloy has been replaced by Alloy 6026 which has a lower Lead content.

# CHEMICAL COMPOSITION

BS EN 573-3:2009 Alloy 6262	
Element	% Present
Copper (Cu)	0.15 - 1.4
Magnesium (Mg)	0.8 - 1.2
Silicon (Si)	0.4 - 0.8
Iron (Fe)	0.7 max
Bismuth (Bi)	0.4 - 0.7
Lead (Pb)	0.4 - 0.7
Zinc (Zn)	0.25 max
Manganese (Mn)	0.15 max
Titanium (Ti)	0.15 max
Others (Total)	0.15 max
Chromium (Cr)	0.04 - 0.14
Other (Each)	0.05 max
Aluminium (Al)	Balance

## **ALLOY DESIGNATIONS**

Aluminium alloy 6262 also corresponds to the following standard designations and specifications **but may not be a direct equivalent:** 

AA6262

Al 1.0Mg 0.6Si Pb

A96262

PLEASE NOTE: Due to European Environmental Protection Directives:

# 2000/53/CE-ELV - For the automotive sector

# 2002/95/CE-RoHS – For the electrical and electronics sector

This alloy has been replaced by Alloy 6026 which has a lower Lead content.

## **TEMPER TYPES**

The most common tempers for 6262 aluminium are:

- T9 Solution heat treated, artificially aged and cold worked
- · T6 Solution heat treated and artificially aged

#### SUPPLIED FORMS

Alloy 6262 is supplied as round bar for machining

Bar



## GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.71 g/cm³
Melting Point	582 °C
Thermal Expansion	23.4 x10 <sup>-6</sup> /K
Modulus of Elasticity	68.3 GPa
Thermal Conductivity	172 W/m.K
Electrical Resistivity	$0.039~\text{x}10^{-6}~\Omega$ .m

## MECHANICAL PROPERTIES

BS EN 755-2:2008 Rod & Bar Up to 200mm Dia. & A/F	
Property	Value
Proof Stress	240 Min MPa
Tensile Strength	260 Min MPa
Elongation A50 mm	8 Min %
Hardness Brinell	75 HB
Elongation A	10 Min %

Properties above are for material in the T6 condition

BS EN 755-2: 2008 Tube Up to 25mm Wall Thickness	
Property	Value
Proof Stress	240 Min MPa
Tensile Strength	260 Min MPa
Elongation A50 mm	8 Min %
Hardness Brinell	75 HB
Elongation A	10 Min %

Properties above are for material in the T6 condition

BS EN 755-2: 2008 Profiles Up to 25mm Wall Thickness	
Property	Value
Proof Stress	240 Min MPa
Tensile Strength	260 Min MPa
Elongation A50 mm	8 Min %
Hardness Brinell	75 HB
Elongation A	10 Min %

Properties above are for material in the T6 condition

## **WELDABILITY**

Alloy 6262 is readily weldable by all commercial methods and can also be brazed.

Weldability – Gas: Excellent Weldability – Arc: Excellent

Weldability - Resistance: Excellent

Brazability: Excellent

## **FABRICATION**

Workability - Cold: Poor Machinability: Excellent



## **CONTACT**

Please make contact directly with your local service centre, which can be found via the Address:

Locations page of our web site

Web: www.aalco.co.uk

## **REVISION HISTORY**

**Datasheet Updated** 18 July 2019

## **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  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 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.