



## Aluminium Alloy - 6026 - T9 Rod and Bar

### SPECIFICATIONS

Commercial	6026
EN	6026

Aluminium alloy 6026 is a recent developed alloy meeting the following European Environmental Protection Directives:

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

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

Alloy 6026 does not contain Tin (Sn) which can cause weakness and cracking of machined parts when subjected to stress and high temperature.

Alloy 6026 has excellent corrosion resistance and is suitable for anodising to provide both decorative and hard anodised finishes.

Alloy 6026 is a good alternative to alloys 6061 and 6082. Extruded Bars in alloy 6026 have the same minimum tensile strength as alloys 2011 & 2030.

#### Applications

6026 can be used in place of alloys 6082 or 6081, especially where the finished parts require extensive machining

~ Machined Parts – Especially on high speed automatic lathes

~ Decorative Anodising

~ Hard Anodising

~ Hot Forging

~ Automotive Components such as Brake Systems

~ Electrical & Electronic Parts

### CHEMICAL COMPOSITION

Element	% Present
Bismuth (Bi)	0.5 - 1.5
Silicon (Si)	0.6 - 1.4
Magnesium (Mg)	0.6 - 1.2
Manganese (Mn)	0.2 - 1
Iron (Fe)	0.7 max
Copper (Cu)	0.2 - 0.5
Lead (Pb)	0.4 max
Zinc (Zn)	0.3 max
Chromium (Cr)	0.3 max
Titanium (Ti)	0.2 max
Others (Total)	0.15 max
Tin (Sn)	0.05 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

### TEMPER TYPES

The most common temper for 6026 aluminium is:

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

### SUPPLIED FORMS

Alloy 6026 is typically supplied as extruded and/or drawn bar

- Bar

### GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.72 g/cm <sup>3</sup>
Thermal Expansion	23.4 x10 <sup>-6</sup> /K
Modulus of Elasticity	69 GPa
Thermal Conductivity	172 W/m.K
Electrical Resistivity	0.039 x10 <sup>-6</sup> Ω .m



## Aluminium Alloy - 6026 - T9 Rod and Bar

### MECHANICAL PROPERTIES

6026 T9 Extruded and Drawn Bar	
Property	Value
Proof Stress	330 Min MPa
Tensile Strength	360 Min MPa
Elongation A50 mm	4 Min %
Hardness Brinell	95 Min HB

### MACHINABILITY

6026 can be used in place of alloys 6082 or 6081, especially where the finished parts require extensive machining on high speed automatic lathes and machining centres

### WELDABILITY

Weldability of alloy 6026 is good

### CONTACT

Address:	Wilsons Ltd Nordic House Old Great North Road Huntingdon PE28 5XN
Tel:	+44 (0)1480 456421
Email:	<a href="mailto:sales@wilsonsmetals.com">sales@wilsonsmetals.com</a>
Web:	<a href="http://www.wilsonsmetals.com">www.wilsonsmetals.com</a>

### REVISION HISTORY

Datasheet Updated	13 November 2018
-------------------	------------------

### 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.