6026 Aluminium
Technical Datasheet

Commercial Aluminium Alloy

Applications
- Electrical & electronic parts
- Machined parts
- Automotive components
- Hot forging
- Hard anodising
- Braking systems

Key features:
- Excellent corrosion resistance
- Suitable for anodising
- Meets European Environmental Protection Directives
- Does not include Tin (Sn) which can cause cracking in machined parts

Product Description
Recently developed to meet European Environmental Protection Directives, 6026 aluminium alloy offers excellent corrosion resistance and is suitable for anodising to provide both decorative and hard anodised finishes. The alloy does not contain Tin (Sn) as inclusion of this element can cause cracking in machine parts when subjected to stress and high temperature. 6026 is highly suitable for extensive machining especially in use with high speed automatic lathes.

EU Environmental Protection Directive - complies with:
2000/53/CE-ELV – For the automotive sector
2002/95/CE-RoHS – For the electrical and electronics sector

Related Material Specifications
- A95754
- Al 3.1Mg Mn Cr
- Al Mg3
- AW-5754

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.

Availability
Bar

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th>Bi</th>
<th>Si</th>
<th>Mg</th>
<th>Mn</th>
<th>Cu</th>
<th>Fe</th>
<th>Pb</th>
<th>Zn</th>
<th>Cr</th>
<th>Ti</th>
<th>Sn</th>
<th>Al</th>
<th>Other</th>
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</thead>
<tbody>
<tr>
<td>min.</td>
<td>0.50</td>
<td>0.60</td>
<td>0.60</td>
<td>0.20</td>
<td>0.20</td>
<td>0.40</td>
<td>0.30</td>
<td>0.30</td>
<td>0.20</td>
<td>0.05</td>
<td>Bal</td>
<td>0.05</td>
</tr>
<tr>
<td>max.</td>
<td>1.50</td>
<td>1.40</td>
<td>1.20</td>
<td>1.00</td>
<td>0.50</td>
<td>0.70</td>
<td>0.30</td>
<td>0.30</td>
<td>0.20</td>
<td>0.05</td>
<td>Bal</td>
<td>0.15</td>
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</tbody>
</table>

Mechanical Properties

| Tensile Strength | 360 MPa min |
| Elongation A50 mm | 4% |
| Proof Stress     | 330 MPa min |
| Brinell Hardness | 95 HB min   |

Physical Properties

- Density: 2.72 g/cm³
- Thermal Expansion: 23.4 x 10⁻⁶ /K
- Modulus of Elasticity: 69 GPa
- Thermal Conductivity: 138 W/m.K

Technical Assistance
Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

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