L80/L81
Technical Datasheet

Applications
- Aircraft parts
- Offshore structures
- Silos
- Containers
- Boat construction
- Vehicle panels
- Containers

Product Description
Alloy L80/L81 is an aluminium sheet product which is recognised as a general sheet metal work grade. The material offers high marine corrosion resistance with good weldability and very good cold formability. The alloy is also known for rapid work hardening so care needs to be taken in the forming process. L80/L81 is used in the manufacture of aircraft parts and structural marine applications among many others.

Key features:
- Medium strength alloy
- Good ductility & formability
- Readily weldable
- High resistance to marine corrosion
- Rapid work hardening
- Very good anodising properties
- Aesthetically pleasing

Availability
Sheet

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th>Mn</th>
<th>Fe</th>
<th>Cu</th>
<th>Mg</th>
<th>Si</th>
<th>Zn</th>
<th>Cr</th>
<th>Ti</th>
<th>Al</th>
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</thead>
<tbody>
<tr>
<td>min</td>
<td>0.10</td>
<td>1.70</td>
<td>Bal</td>
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<td>0.15</td>
<td>0.05</td>
<td>Bal</td>
<td>Bal</td>
</tr>
<tr>
<td>max</td>
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<td>0.50</td>
<td>0.15</td>
<td>2.40</td>
<td>0.40</td>
<td>0.15</td>
<td>0.15</td>
<td>Bal</td>
</tr>
</tbody>
</table>

Mechanical Properties

| Proof Stress 0.2% 175 MPa min | Tensile Strength 225-275 MPa | Elongation A50 mm 3% |

Physical Properties

| Density 2.69 g/cm³ | Melting Point 625°C | Thermal Expansion 25 x 10⁻⁶ /K | Modulus of Elasticity 70 GPa | Thermal Conductivity 134 W/m.K | Electricity Resistivity 0.044 x 10⁻⁶ Ω.m |

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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