

AMS 4911 - TITANIUM 6AL4V SHEETS

6AL4V Sheet and Plate (AMS 4911) is a high-performance titanium alloy product form that adheres to the rigorous standards set forth in the Aerospace Material Specification (AMS) 4911.

Manufactured in sheet and plate forms, 6AL4V (AMS 4911) retains the exceptional attributes that have made this alloy a preferred choice across multiple industries. The combination of impressive strength relative to its weight, corrosion resistance, and biocompatibility positions 6AL4V as a material well-suited for structural and component applications across multiple industries.

The sheet and plate products are particularly advantageous in scenarios where dimensional accuracy, flatness, and uniform thickness are essential, this allows precise manufacturing techniques, such as machining, forming, and fabrication, allowing for the creation of intricate, complex components that adhere to stringent tolerance requirements.

In the aerospace sector, 6AL4V (AMS 4911) sheets and plates find applications in the construction of aircraft structures, engine components, and other critical parts subject to extreme loads and harsh environments.

Beyond aerospace, the biocompatibility of 6AL4V (AMS 4911) sheets and plates makes them suitable for the manufacturing of medical implants, surgical instruments, and other healthcare-related products.

| Specific Gravity | | | | | | | | | |
|--|---|-----|---|---|------------------------|------|----|---|---|
| 4.484 g/cm3 | | | | | | | | | |
| Typical Applications | | | | | Related Specifications | | | | |
| Medical Implants Turbine Blades Fasteners Motor Racing applications Aircraft Structural Components | | | | | AMS 2631C | | | | |
| | | | | | AMS 4911 | | | | |
| | | | | | AMS STD 2154 | | | | |
| | | | | | Mil T 9046 | | | | |
| | | | | | ASTM B265 | | | | |
| | | | | | TA10 | | | | |
| | | | | | TA56 | | | | |
| | | | | | TA59 | | | | |
| | | | | | UNS R56400 | | | | |
| MSRR 8633 | | | | | | | | | |
| Chemical Composition (Wt %) | | | | | | | | | |
| | C | Al | N | O | Ti | V | Fe | H | Y |
| Min | — | 5.5 | — | — | — | 3.50 | — | — | — |

| | | | | | | | | | |
|--------------------------------------|-------------------------|-------------------|--------------------------|-----------------|-----|------|------|------|-------|
| Max | 0.08 | 6.75 | 0.05 | 0.2 | Bal | 4.50 | 0.25 | 0.01 | 0.005 |
| Typical Mechanical Properties | | | | | | | | | |
| 0.2% Proof Stress | Tensile Strength | Elongation | Reduction of area | Hardness | | | | | |
| MPA | MPA | % | % | HRC | | | | | |
| Min | Min | Min | Min | | | | | | |
| 830 | 900 | 8 | 20 | 36 | | | | | |

* This data has been supplied in good faith and is indicative only. It has been provided for general information purposes only and is not to be relied upon in place of the full specification. Mechanical properties can vary considerably with different supply conditions such as heat treatment or temper and product dimensions.

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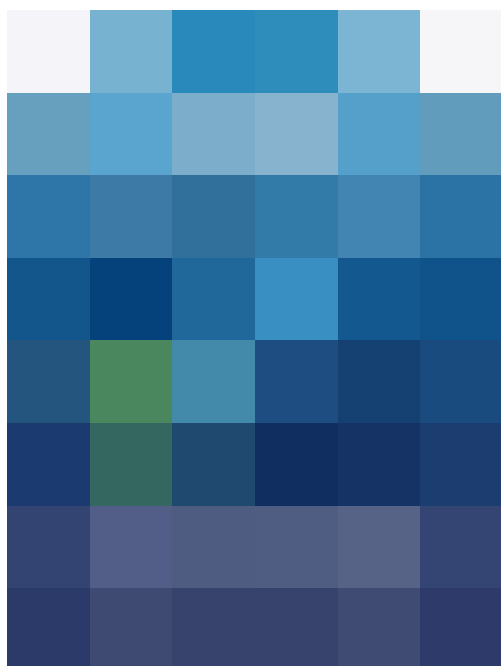
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