

# AERONAUTICAL MATERIAL SPECIFICATION

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## RIVETS, ALLOY, CORROSION AND HEAT RESISTANT Nickel Base - 15.5Cr - 8Fe

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Rivets requiring corrosion resistance, and heat and oxidation resistance up to approximately 1800 F, but not high strength at that temperature. Rivets should not be hand peened during riveting.
3. COMPOSITION:

|                       |               |
|-----------------------|---------------|
| Carbon                | 0.08 max      |
| Manganese             | 1.00 max      |
| Silicon               | 0.50 max      |
| Chromium              | 14.00 - 17.00 |
| Nickel + Cobalt       | 72.00 min     |
| Cobalt, if determined | 1.00 max      |
| Iron                  | 6.00 - 10.00  |
| Copper                | 0.50 max      |
4. CONDITION: Cold headed from cold-drawn material, and annealed unless purchaser permits machining.
5. TECHNICAL REQUIREMENTS:
  - 5.1 Annealing: Rivets shall be heated to 1950 F  $\pm$  10, held at heat for 15-30 min., cooled in air and descaled.
  - 5.2 Hardness: Rivets shall have hardness not higher than Vickers 150 or equivalent, when determined on a flat surface.
  - 5.3 Formability: Rivets shall be capable of being driven satisfactorily with a full head free from cracks.
6. QUALITY: Rivets shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to their performance.
7. REPORTS: Unless otherwise specified, the vendor shall furnish with each shipment three copies of a report of the results of tests for chemical composition of each lot in the shipment. This report shall include the purchase order number, material specification number, part number, size, and quantity.
8. PACKAGING:
  - 8.1 Rivets of different part numbers shall be packed in separate containers.

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