

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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## AMS 3410B

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### FLUX Brazing (Silver)

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **FORM:** Paste containing not more than 30% water by weight.
3. **APPLICATION:** Silver brazing non-ferrous (excluding aluminum and magnesium-base alloys) and ferrous metals including austenitic steels, at temperatures between 1200 and 1600F.  
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4. **REQUIREMENTS:**
  - (a) Flux shall withstand heating in a ceramic container to 1600F and holding at this temperature for 30 minutes without appreciable change in chemical characteristics, except for loss of water. On heating, flux shall fuse at 1150F or lower; on cooling from 1600F, flux shall remain in the liquid state until temperature drops to 1150F or lower.
  - (b) Flux, when placed on a 40-mesh sieve and worked lightly with a brush, shall pass completely through the sieve. If the flux has partially coagulated in the container, the flux may, before conducting the test, be warmed over a water bath until it has returned to its normal consistency.  
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  - (c) Flux shall not produce, during use, a flame or smoke of sufficient intensity to obscure the work.
  - (d) Flux, diluted with water as required, shall have acceptable fusibility and acceptable application and fluxing characteristics, and shall produce satisfactory brazed joints of any type on copper-base alloys and all types of steels, including corrosion resistant types, when used in conjunction with silver brazing alloys.  
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  - (e) Flux shall be soluble in water at 175F or less after being subjected to brazing operations.
5. **QUALITY:**
  - (a) Flux shall be an intimately blended mixture of uniform consistency. It shall not separate in container to such an extent that it cannot be restored to uniform consistency by stirring.
  - (b) Flux shall be free from all substances which might affect its serviceability.
6. **REPORTS:** Unless otherwise specified, the vendor shall furnish with each shipment three copies of a normalized report stating that flux conforms to all requirements of this specification. This report shall include the purchase order number, material specification number and title, batch number, date of manufacture, and quantity.  
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