



# AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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**AMS 3170C**  
Superseding AMS 3170B

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## THINNER Alcohol - Ester

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **APPLICATION:** Primarily as a thinner for, and as the principal portion of the volatile fraction of, AMS 3132 synthetic resin varnish.
3. **COMPOSITION:** Thinner shall be a thoroughly blended mixture of the following composition by weight:

	min	max
Amyl or Butyl Alcohol	58	62%
Proprietary or Specially Denatured Ethyl Alcohol	13	17%
Amyl or Butyl Acetate	23	27%

- 3.1 The denatured ethyl alcohol shall be of such composition that the ethyl alcohol cannot be separated by distillation and shall be compatible with the other thinner components.
4. **TECHNICAL REQUIREMENTS:**
  - 4.1 **General:** Thinner shall be clear, colorless, and free from suspended matter and shall be compatible with AMS 3132 varnish. Impurities shall not be present in amounts which might adversely affect its suitability for the primary applications specified.
  - 4.2 **Specific Gravity:** Shall be 0.822 - 0.832 at 15.6/15.6 C (60/60 F).
  - 4.3 **Distillation:** Thinner shall distill completely within the range of 73.3 - 144.4 C (164 - 292 F).
  - 4.4 **Odor:** Thinner shall have a fruity odor, characteristic of esters.
5. **REPORTS:** Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report stating that the product conforms to the requirements of this specification. This report shall include the purchase order number, material specification number and its revision letter, and quantity.
6. **PACKAGING:** Unless otherwise specified, thinner shall be supplied in 5 gal metal containers with sealed openings. Interior of containers shall be free from corrosion and, if treated to prevent corrosion, shall be coated with a material unaffected by the solvent action of the contents.
7. **IDENTIFICATION:** Each container shall be legibly marked to show this specification number and its revision letter, specification title, manufacturer's identification, and quantity.
8. **APPROVAL:**
  - 8.1 To assure adequate performance characteristics, thinner shall be approved by purchaser before thinner for production use is supplied, unless such approval be waived. Results of tests on production thinner shall be essentially equivalent to those on the approved sample.

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