



# AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 1000

**AMS 3165B**  
Superseding AMS 3165A

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## SOLVENT, PETROLEUM Aromatic

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **APPLICATION:** Primarily for use as a paint thinner and as a solvent cleaner where applicable.
3. **MATERIAL:** Shall consist of a blend of petroleum hydrocarbons.
4. **TECHNICAL REQUIREMENTS:** Solvent shall conform to the following requirements; tests shall be conducted in accordance with the issue of specified ASTM methods listed in the latest issue of AMS 2350, insofar as practicable.
  - 4.1 **Physical Properties:**

Color	+ 21 min	ASTM D156
Specific Gravity at 20/20 C (68/68 F)	0.825 - 0.875	ASTM D891
Flash Point	27 C (80.6 F) min	ASTM D56
Distillation		ASTM D86
Initial Point	129 C (264.2 F) min	
50% Point	143 - 168 C (289.4 - 334.4 F)	
End Point	191 C (375.8 F) max	
Acidity of Residue	Not Acid	
Mixed Aniline Point	28 C (82.4 F) max	ASTM D1012
Corrosion at 100 C (212 F)	1 max	ASTM D130
  - 4.2 **Acidity:** Not more than 0.03 mg of potassium hydroxide shall be required to neutralize the acidity of 1 g of solvent when tested in accordance with ASTM D974.
  - 4.3 **Nonvolatile:** Solvent shall contain not more than 0.2 g nonvolatile matter per 100 ml solvent when determined in accordance with Federal Test Method Standard No. 141a, Method 4041.1.
  5. **QUALITY:** Solvent shall be clean and free from suspended solids, undissolved water, and sediment when examined by transmitted light. The odor of the solvent shall be "sweet" and slightly aromatic after 24 hr of air drying at room temperature on filter paper.
  6. **REPORTS:** Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report of the results of tests to determine conformance to the requirements of this specification. This report shall include the purchase order number, material specification number and its revision letter, and quantity.
  7. **IDENTIFICATION:** Each container shall be legibly marked to show AMS 3165B, product name, purchase order number, manufacturer's identification, and quantity.
  8. **APPROVAL:**
    - 8.1 To assure adequate performance characteristics, solvent shall be approved by purchaser before solvent for production use is supplied, unless such approval be waived. Results of tests on production solvent shall be essentially equivalent to those on the approved sample.

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