

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
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## ENAMEL, BLACK BAKING Phenolic

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. TYPE: Semi-gloss baking black.

3. APPLICATION: As an exterior or interior coating for metal surfaces exposed to corrosive conditions.

4. COMPOSITION:

4.1 Product, by weight:

Non-Volatile	50% min
Volatile	50% max

4.1.1 Non-Volatile:

Resin	74-75%
Pigment	25-26%

4.1.1.1 Resin: Shall be a thermosetting phenolic type with softening agents added; it shall be free from rosin, rosin derivatives, oils and cellulose derivatives.

4.1.1.2 Pigment: Shall be a mixture of carbon black and animal black in proportions required to produce an enamel meeting the requirements of 5.6.2.

4.1.2 Volatile: Shall be an organic solvent composed of one or more of the following types of compounds: alcohols, esters, hydrocarbons and ketones.

5. TECHNICAL REQUIREMENTS:

5.1 General: Enamel shall be of uniform consistency, and free from bubbles, grit, rough particles, floating or caked pigments, and ingredients of respiratory toxicity under normal conditions of use. Component ingredients shall be intimately mixed, and processed as required to produce a product which is stable and not subject to abnormal change with age in sealed containers.

5.2 Coarse Particles: Not more than 0.1% by weight of the enamel shall be retained on a No. 325 screen.

5.3 Flash Point, Tag Closed Tester: Shall be not lower than 60 F.

5.4 Viscosity: Shall be not less than 4 poises absolute at 77 F not less than 24 hr after manufacture.

5.5 Skinning and Livering: Shall be absent in a 1/4-filled closed container after standing one week.

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