



# AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
485 LEXINGTON AVENUE, NEW YORK, N. Y. 10017

**AMS 3128D**  
Superseding AMS 3128C

Issued 10-1-45  
Revised 5-1-68

## ALUMINUM PIGMENT PASTE

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 pigment of aluminum paint to be used as exterior protective coating on metal surfaces.
3. **COMPOSITION:**
  - 3.1 **Nonvolatile:** Shall consist of commercially pure aluminum powder in the form of fine, polished flakes and the minimum of fatty lubricant required to manufacture paste meeting the requirements of 4.1.
  - 3.2 **Volatile:** Volatile thinner shall consist of a mixture of refined, water-white, high-flash naphtha and mineral spirits in such proportions as to permit compliance with the requirements of 4.4.
  - 3.3 **Compounding:** The component ingredients shall be intimately assembled and processed in accordance with best practice for high quality aluminum paste to produce a product which is suitable for use as aircraft paint pigment and is stable and not subject to abnormal change in a sealed container.
4. **TECHNICAL REQUIREMENTS:** When ASTM methods are specified for determining conformance to the following requirements, tests shall be conducted in accordance with the issue of the ASTM method listed in the latest issue of AMS 2350.
  - 4.1 Paste shall conform to the following requirements when tested in accordance with ASTM D480:
 

|   |   |             |
|---|---|-------------|
| Ø | Nonvolatile matter at 221 - 230 F (105 - 110 C), %                    | 64.5 - 68.0 |
|   | Easily extracted fatty and oily matter (polishing lubricant), % , max | 3.0         |
|   | Metallic impurities, %, max   | 1.0         |
|   | Coarse particles retained on a No. 325 screen, %, max                 | 0.1         |
  - 4.2 Paste shall be suitable for making aluminum paint and shall contain no filler or adulterant, such as mica.
  - 4.3 Paste shall withstand the Stability Test specified in ASTM D480 and shall not deteriorate to such an extent as to affect its suitability as a paint pigment after storage in unopened containers for one year of normal service storage conditions.
  - 4.4 Paste shall show good "leafing" properties. A paint made by mixing with vehicle, AMS 3130, in the proportions of 16 oz of paste to 1 gal of vehicle shall be free flowing, suitable for either brush or spray application, and shall give a continuous coating at least equal in smoothness, luster, and general appearance to that obtained with a paint mixed in the same proportions from the standard paste mutually agreed upon by purchaser and vendor.
5. **REPORTS:** Unless otherwise specified, the vendor of paste shall furnish with each shipment three copies of a report stating that the paste conforms to the requirements of this specification. This report shall include the purchase order number, material specification number and its revision letter, batch number, and quantity.

SAE Technical Board rules provide that: "All technical reports, including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."