

AEROSPACE MATERIAL SPECIFICATION



AMS 3731/4B

Issued 1 OCT 1981
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Superseding AMS 3731/4A

Submitted for recognition as an American National Standard

POTTING COMPOUND, EPOXY
Bisphenol A-Type
Impregnating Resin, Heat Cure, Single Component

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of July, 1992. It is recommended, therefore, that this specification not be specified for new designs.

This cover sheet should be attached to revision "A" of the subject specification.

"NONCURRENT" refers to those materials which have previously been widely used and which may be required on some existing designs in the future. The Aerospace Materials Division, however, does not recommend these as standard materials for future use in new designs. Each of these "NONCURRENT" specifications is available from SAE upon request.

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1. SCOPE:

- 1.1 Form: This specification covers a single component epoxy resin formulation requiring an oven cure for attainment of maximum properties.
- 1.2 Application: Primarily for use in impregnating coils and other wire wound devices and where flammability resistance is not required.

2. APPLICABLE DOCUMENTS: See AMS 3731.

3. TECHNICAL REQUIREMENTS:

- 3.1 Basic Specification: The complete requirements for procuring the product described herein shall consist of this document and the latest issue of the basic specification, AMS 3731.
- 3.2 Material: Shall be an epoxy-based polymer supplied as a single component containing all the necessary curing agents.
- 3.3 Properties: The compound shall conform to the following requirements:
 - 3.3.1 Uncured Compound: The compound, prepared in accordance with manufacturer's instructions, shall exhibit the following properties:
 - 3.3.1.1 Viscosity: Shall be not greater than 1500 centipoise (1.5 Pa•s) at 23°C (73°F), determined using a Brookfield Model LVF viscometer and No. 2 spindle at 12 revolutions per minute.
 - 3.3.1.2 Pot Life: Usable life of the compound, defined as the time to attain double the initial viscosity determined in 3.3.1.1, shall be not less than 40 hr at 77°C (170°F).

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