



AEROSPACE MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

AMS 3136A

Superseding AMS 3136

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PHENOLIC RESIN COATING MATERIAL, TFE PIGMENTED 300 F (149 C) Cure

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 dry film lubricant, applied by spray techniques, on materials not adversely affected by cure temperature of 300 F (149 C).
3. MATERIAL: A formulation consisting of two parts: a colloidal dispersion of polytetrafluoroethylene pigment and dispersing agents, and a binder consisting of phenolic resin with dye and dispersing agents.
4. COMPOSITION:
 - 4.1 TFE Pigment Component, by weight:

Nonvolatile	59 - 61%
Volatile	39 - 41%

 - 4.1.1 Nonvolatile: Shall be polytetrafluoroethylene resin particles with necessary wetting agents and dispersing agents.
 - 4.1.2 Volatile: Shall be water.
 - 4.2 Phenolic Resin Component, by weight:

Nonvolatile	10 - 12%
Volatile	88 - 90%

 - 4.2.1 Nonvolatile: Shall be a thermosetting phenolic type with dye and necessary dispersing agents.
 - 4.2.2 Volatile: Shall be an organic solvent composed of alcohols, esters, and diluents.
 - 4.3 Mixed Product, by weight: Shall conform to the following, when mixed in accordance with manufacturer's recommendations:

Nonvolatile	19 - 21%
Volatile	79 - 81%
5. TECHNICAL REQUIREMENTS:
 - 5.1 General:
 - 5.1.1 Shelf Life: The colloidal polytetrafluoroethylene resin, after storage in a full, closed 1 qt container at $77\text{ F} \pm 2$ ($25\text{ C} \pm 1.1$) for 60 days, shall show no evidence of gelation and shall, after mixing with phenolic resin binder in accordance with manufacturer's recommendations, produce a uniform dispersion free from curds.
 - 5.1.2 Pot Life: Material in 100 g batches, after mixing in accordance with manufacturer's recommendations, shall have a useful pot life of not less than 22 hr when maintained at $60 - 80\text{ F}$ ($15.6 - 26.7\text{ C}$)

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