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AEROSPACE MATERIAL SPECIFICATION



AMS 3819B

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Superseding AMS 3819A

(R)

Cloths, Cleaning For Aircraft Primary and Secondary Structural Surfaces

1. SCOPE:

1.1 Form:

This specification covers both woven and nonwoven absorbent materials supplied as either dry cloths or as presaturated cloths for solvent cleaning process applications.

1.2 Application:

These cloths have been used typically in cleaning smooth or textured, metallic and nonmetallic surfaces preparatory to processing operations which are sensitive to residual surface contamination, but usage is not limited to such applications. Cloths qualified to this specification are not intended for use on transparencies.

1.3 Classification:

Cloths covered by this specification are classified as follows:

- Class 1 Virgin cloth, composed of 100% cotton fibers, with or without added binders.
- Class 2 Virgin cloth, composed of 100% synthetic or blended synthetic, cotton, or cellulose materials, with or without added binders, which remain stable up to 400 °F (204 °C).
- Class 3 Class 1 or Class 2 cloth wipes contained in a pre-saturated wiping system, except that binders, surfactants or other chemical treatments shall not be included (See 8.6). Solvent used in the pre-saturation process shall either be qualified to AMS 3166 or shall be approved as acceptable by the purchaser.

- Grade A For use in cleaning operations where exceptionally low residual surface contamination levels are required.
- Grade B For use in cleaning operations where low residual surface contamination levels are required.

1.3.1 Grade A cloths may be substituted for Grade B at any time for processing operations.

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1.3.2 Unless purchaser specifies a specific cloth, either Class 1 or Class 2 may be supplied.

2. APPLICABLE DOCUMENTS:

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been canceled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AMS 3166 Solvents, Cleaning Prior to Application of Sealing Compounds
PD 2000 Procedures for An Industry Qualified Product Management System

2.2 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM D 329 Acetone
ASTM D 740 Methyl Ethyl Ketone
ASTM D 1117 Evaluating Nonwoven Fabrics
ASTM D 1193 Reagent Water
ASTM D 1776 Conditioning Testing Textiles
ASTM D 1836 Commercial Hexanes
ASTM D 2257 Extractable Matter in Textiles
ASTM D 3776 Mass per Unit Area (Weight) of Fabric
ASTM E 70 pH of Aqueous Solutions With the Glass Electrode
ASTM E 168 General Techniques of Infrared Quantitative Analysis

3. TECHNICAL REQUIREMENTS:

3.1 Qualification:

All products sold to this specification shall be listed, or approved for listing, on the qualified products list, PRI QPL AMS 3819. The qualified products list shall be in accordance with PD 2000.

3.2 Construction:

Cloths shall be oriented into a planar assembly by woven or nonwoven techniques to yield a dry cloth weight of 1.0 to 6.0 ounces per square yard (34 to 203 g/m²).

3.3 Binder:

Binding materials shall be water insoluble and shall not exceed 5% of the dry cloth weight.