



AEROSPACE MATERIAL SPECIFICATION

AMS3870™

REV. E

Issued 1961-01
Revised 1993-01
Stabilized 2016-06

Superseding AMS3870D

Ceramic Moldings and Extrusions
Dense, Ultra-High Alumina (99% Al₂O₃)

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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Documents

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1. SCOPE:

1.1 Form: This specification covers dense, ultra-high alumina in the form of moldings and extrusions.

1.2 Application: Primarily for high-temperature, low-electrical-loss radomes, microwave windows, and spacers.

2. APPLICABLE DOCUMENTS: The following publications form a part of this specification to the extent specified herein. The latest issue of Aerospace Material Specifications shall apply. The applicable issue of other documents shall be as specified in AMS 2350.

2.1 SAE Publications: Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096.

2.1.1 Aerospace Material Specifications:

AMS 2350 - Standards and Test Methods

2.2 ASTM Publications: Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

ASTM C373 - Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products

ASTM D116 - Testing Vitrified Ceramic Materials for Electrical Applications

ASTM D150 - A-C Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulating Materials

ASTM D256 - Impact Resistance of Plastics and Electrical Insulating Materials

2.3 U.S. Government Publications: Available from Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120.