

METRIC

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SUPERSEDING
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FEDERAL SPECIFICATION

SULFURIC ACID, ELECTROLYTE (FOR STORAGE BATTERIES)

The General Services Administration has authorized the use of this federal specification by all federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This federal specification covers four classes of sulfuric acid for use as an electrolyte in lead-acid storage batteries.

1.2 Classification. Sulfuric acid, electrolyte shall be of the following classes as specified (see 6.2).

Class 1 - Concentrated, minimum 93.2 percent sulfuric acid.

Class 2 - Diluted 49.5 to 50.5 percent sulfuric acid.

Class 3 - Diluted 36.5 to 37.5 percent sulfuric acid.

Class 4 - Diluted 28.3 to 29.5 percent sulfuric acid.

1.3 Unit of issue. The unit of issue and number of units shall be as specified in the acquisition order (see 6.2).

2. APPLICABLE DOCUMENTS

2.1 Government publications. The issues of the following documents, in effect on the date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: Defense Supply Center Richmond, ATTN: DSCR-VBD, Richmond, VA 23297-5610.

AMSC N/A

FSC 6810

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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Federal Standard:

FED-STD-313 - Material Safety Data, Transportation Data, and Disposal Data for Hazardous Materials Furnished to the Government

(Activities outside the Federal Government may obtain copies of the federal specifications, standards and commercial item descriptions as specified in the General Information section of the Index of Federal Specifications, Standards and Commercial Item Descriptions. The Index is for sale on a subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

(Single copies of this specification, and other federal specifications and commercial item descriptions required by activities outside the Federal Government for bidding purposes are available without charge from the General Services Administration, Federal Supply Service Bureau, Specification Section, Suite 8100, 470 L'Enfant Plaza, SW, Washington, DC 20407.)

(Federal Government activities may obtain copies of federal standardization documents and the Index of Federal Specifications, Standards, and Commercial Item Descriptions from established distribution points in their agencies.)

Military Specification:

MIL-STD-129 - Marking for Shipment and Storage

(Copies of military specification and standards required by contractors in connection with specification procurement functions are obtained from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

Code of Federal Regulations (CFR):

Title 29, Part 1910.1200 - Hazardous Communication
Title 49, Parts 100 to 199 - Department of Transportation Hazardous Materials Regulations

(The Code of Federal Regulations (CFR) and the Federal Register (FR) are for sale on a subscription basis for the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. When indicated, reprints of certain regulations may be obtained from the federal agency responsible for issuance thereof.)

Federal Acquisition Regulations (FAR)

(The Federal Acquisition Regulations (FAR) is for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect of the date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM) Standards:

- ASTM D 1193 - Standard Specification for Reagent Water (DoD adopted)
- ASTM D 4169 - Standard Practice for Performance Testing of Shipping Containers and Systems (DoD adopted)
- ASTM D 4919 - Standard Specification for Testing of Hazardous Materials Packaging (DoD adopted)

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

International Civil Aviation Organization

Technical Instructions for the Safe Transport of Dangerous Goods by Air

(Application for copies should be addressed to the International Civil Aviation Organization, 100 Sherbrooke Street West, Suite 400, Montreal, Quebec, Canada H3A 2R2.)

International Maritime Organization

International Maritime Dangerous Goods Code

(Application for copies should be addressed to the International Maritime Organization, 101-104 Piccadilly, London, W1V 0AE, England.)

3. REQUIREMENTS

3.1 Material. Sulfuric acid, electrolyte shall be non-fuming and free from sediment when tested as specified in 4.3.2.

3.2 Color. Sulfuric acid, electrolyte shall have a color no darker than that of a standard color solution when tested as specified in 4.3.3.

3.3 Acid content and specific gravity. The blend of sulfuric acid, electrolyte shall conform to the characteristics given in table I when tested for acid content as specified in 4.3.4 and specific gravity as specified in 4.3.5.