

METRIC

A-A-55828

February 6, 1997

SUPERSEDING

O-S-809E

Amendment 1

October 21, 1992

COMMERCIAL ITEM DESCRIPTION

SULFURIC ACID, TECHNICAL

The General Services Administration has authorized the use of this commercial item description as a replacement for O-S-809E for all federal agencies.

1. **SCOPE.** This commercial item description (CID) covers two classes and two types of sulfuric acid, Chemical Abstract Service Registry Number (CAS #) 7664-93-9, for use in galvanizing and plating ferrous metals and for general purpose. Technical grade sulfuric acid is not intended for use as a reagent grade chemical, a food grade chemical, or an electrolyte.

2. **CLASSIFICATION.** Sulfuric acid, technical, shall be of the following types and classes as specified:

2.1 **Type I.** Diluted minimum 93.0% sulfuric acid; minimum specific gravity 1.8347 at 15.6°C/15.6°C (60°F/60°F) or 66.0°Baumé at 15.6°C (60°F).

Class 1. For galvanizing and plating.

Class 2. For general use.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent by letter to: Defense Supply Center Richmond (DSCR), ATTN: DSCR-VBD, 8000 Jefferson Davis Highway, Richmond, VA 23297-5610.

AMSC N/A

FSC 6810

DISTRIBUTION STATEMENT A. Approved for public release; distribution is not limited.

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2.2 Type II. Diluted minimum 77.5% sulfuric acid; minimum specific gravity 1.7040 at 15.6°C/15.6°C (60°F/60°F) or 60.0 °Baumé at 15.6°C (60°F).

Class 1. For galvanizing and plating.

Class 2. For general use.

3. SALIENT CHARACTERISTICS

3.1 Appearance. When inspected visually, the sulfuric acid shall appear to be an oily, clear-to-slightly-cloudy liquid.

3.2 Chemical and physical characteristics. Sulfuric acid shall conform to the chemical and physical characteristics of table 1 when tested in accordance with the American Society for Testing and Materials (ASTM) Standard Methods for Analysis of Sulfuric Acid, ASTM E223.

TABLE 1. Chemical and physical characteristics.

CHARACTERISTIC	TYPE I		TYPE II	
	CLASS 1	CLASS 2	CLASS 1	CLASS 2
Sulfuric acid, percent by weight, minimum	93.0	93.0	77.5	77.5
Specific gravity at 15.6°C/15.6°C (60°F/60°F)	1.8347	1.8347	1.7040	1.7040
Non-volatile matter, percent by weight, maximum	0.025	0.025	0.05	0.05
Arsenic, parts per million (ppm), maximum	3.0	----	3.0	----

4. REGULATORY REQUIREMENTS

4.1 Labeling, packaging and marking. Items shall be labeled, packed and marked in accordance with Title 49 Code of Federal Regulations (CFR), Parts 100 to 199.

4.2 Recovered materials. The contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4.3 Material safety data (MSD) sheets. MSD sheets shall be furnished in accordance with FED-STD-313.

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The product provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The government reserves the right to require proof of such conformance.

5.2 Market acceptability. The item offered must have been sold to the Government or commercial market.

6. **PACKAGING.** Preservation, packing, labeling, and marking shall be as specified in the contract or order.

7. **NOTES.** This section contains information of a general or explanatory nature which is helpful, but is not mandatory.

7.1 Source of documents.

7.1.1 The Code of Federal Regulations and the Federal Acquisition Regulations may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-0001.

7.1.2 Chemical Abstract Service files and data base may be obtained from the Chemical Abstract Service, Customer Services, P.O. Box 3012, Columbus, OH 43210.

7.1.3 American Society for Testing and Materials standards may be obtained from the American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103.

7.1.4 Activities outside the Federal Government may obtain copies of 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.

7.2 Ordering data. Acquisition documents must specify the following:

- a. Title, name, and date of this CID.

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- b. The type and class of sulfuric acid desired.
- c. Unit quantity required.
- d. Packaging requirements.

7.3 National stock numbers (NSNs). The following NSNs correspond to this CID: 6810-00-227-1845 and 6810-01-031-4652. These may not be indicative of all possible NSNs associated with this document.

7.4 Sources of supply. The following products are known to meet the requirements of this CID. Competition is not limited to these suppliers:

Company

Rhône-Poulenc Basic Chemical Company
One Corporate Drive, Box 881
Shelton, CT 06484
(203) 925-3300

Olin Chemicals
20 Long Ridge Rd
Stamford, CT 06904
(203) 750-3000

Eldorado Chemical Company
P.O. Box 419082
St. Louis, MO 63414-1782
(314) 991-2853

SAF Bulk Chemicals
P.O. Box 2060
Milwaukee, WI 53233
800) 336-9719

J.T. Baker
222 Red School Lane
Phillipsburg, NJ 08865
(800) 582-2537

Mallinckrodt Chemical
P.O. Box 800
Paris, KY 40362
(800) 354-2050

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**MILITARY INTERESTS:
ACTIVITIES:**

CIVIL AGENCY COORDINATING

Custodians:

Army - EA

Air Force - 68

PREPARING ACTIVITY:

DLA - GS

(Project No: 6810-1433)

Reviewers:

Army - MI, MD-1