

METRIC
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A-A-55828B  
20 January 2016  
SUPERSEDING  
A-A-55828A  
7 January 2011

## COMMERCIAL ITEM DESCRIPTION

### SULFURIC ACID, TECHNICAL

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. **SCOPE.** This commercial item description (CID) covers two classes and two types of sulfuric acid, Chemical Abstracts Service (CAS) Registry Number 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 (see 7.3(b)):

2.1 **Type I.** Diluted minimum 93.0 percent mass sulfuric acid; minimum specific gravity 1.8347 at 15.5 °C/15.5 °C (60 °F/60 °F) or 66.0 degree Baumé (heavy) at 15.5 °C (60 °F).

Class 1 - For galvanizing and plating

Class 2 - For general use

2.2 **Type II.** Diluted minimum 77.5 percent mass sulfuric acid; minimum specific gravity 1.7040 at 15.5 °C/15.5 °C (60 °F/60 °F) or 60.0 degree Baumé (heavy) at 15.5 °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.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: <a href="mailto:STDZNMGT@dla.mil">STDZNMGT@dla.mil</a> or DLA Aviation VEB, 8000 Jefferson Davis Highway, Richmond, VA 23297-5616. Since contact information can change, you may want to verify the currency of this address information using the ASSIST database at <a href="https://assist.dla.mil/">https://assist.dla.mil/</a> .
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3.2 Chemical and physical characteristics. Sulfuric acid shall conform to the chemical and physical characteristics of table I when tested in accordance with ASTM E223, "Standard Test Methods for Analysis of Sulfuric Acid".

TABLE I. Chemical and physical characteristics.

Characteristics	Type I		Type II	
	Class 1	Class 2	Class 1	Class 2
Sulfuric acid (Total Acidity), percent by mass, minimum	93.0	93.0	77.5	77.5
Specific gravity at 15.5 °C/15.5 °C (60 °F/60 °F)	1.8347	1.8347	1.7040	1.7040
Non-volatile matter, percent by mass, maximum	0.025	0.025	0.05	0.05
Arsenic, µg/g or 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 49 Code of Federal Regulations (CFR), Parts 100 to 180.

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 Safety data sheet (SDS). A SDS shall be furnished in accordance with FED-STD-313, "Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities", and 29 CFR 1910.1200, "Occupational Safety and Health Standards, Hazard Communication".

4.4 Hazard warning label. An Occupational Safety and Health Administration hazard warning label shall be furnished in accordance with 29 CFR 1910.1200.

#### 5. PRODUCT CONFORMANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this CID, 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 products offered must have been previously sold either to the government or on the commercial market.

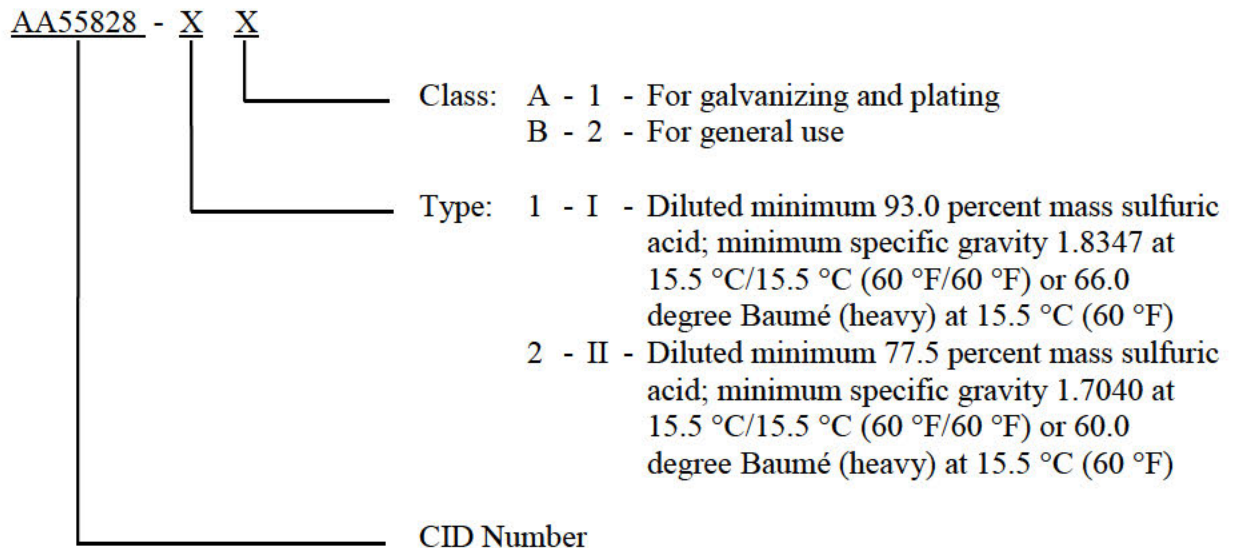
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## 6. PACKAGING

6.1 Preservation, packing, labeling, and marking. Preservation, packing, labeling, and marking shall be as specified in the acquisition order (see 7.3(d)).

## 7. NOTES

7.1 Part or identification number (PIN). The following PIN procedure is for government purposes and does not constitute a requirement for the contractor.



Example of reference part number: AA55828-1A

## 7.2 Source of documents.

7.2.1 CFR and FAR. Copies of CFR and FAR may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Electronic copies of CFR documents may be obtained from <http://www.ecfr.gov/>. Electronic copies of FAR documents may be obtained from <https://www.acquisition.gov/>.

7.2.2 Federal standards. Electronic copies federal standards may be obtained from <http://quicksearch.dla.mil/>.

7.2.3 ASTM standards. Copies of ASTM standards may be obtained from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Electronic copies may be obtained from <http://www.astm.org/>.

7.2.4 CAS registry numbers. Copies of CAS registry numbers may be obtained from the Chemical Abstracts Service, P.O. Box 3012, Columbus, OH 43210. Electronic copies may be obtained from <http://www.cas.org/>.

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7.3 Ordering data. The acquisition order should specify the following:

- a. CID document number, revision, and CID PIN.
- b. Type and class (see 2).
- c. Unit quantity required.
- d. Packaging requirements (see 6.1).

7.4 Subject term (key word) listing.

Arsenic  
Baumé  
Chemical  
Galvanizing  
Plating

**MILITARY INTERESTS:**

**Custodians:**

Army - EA  
Air Force - 68  
DLA - GS

**Review Activities:**

Army - MD1, MI

**CIVIL AGENCY  
COORDINATING ACTIVITY:**

GSA - FAS

**Preparing Activity:**

DLA - GS3

(Project 6810-2016-004)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST database at <https://assist.dla.mil/>.