

[METRIC]  
A-A-50800A  
27 February 1998  
SUPERSEDING  
A-A-50800  
7 October 1988

## COMMERCIAL ITEM DESCRIPTION

### CADMIUM OXIDE

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 one grade of cadmium oxide (CdO) for use in the preparation of cadmium plating solutions.

#### 2. SALIENT CHARACTERISTICS

2.1 Assay. The cadmium oxide shall be a minimum of 87.0 percent by weight cadmium when tested in accordance with ethylenediaminetetraacetic acid (EDTA) titration procedures or equivalent analytical methods.

2.2 Trace metals. The material shall not contain more than 0.050 percent total by weight of silver + lead + tin + copper + mercury + zinc + iron and 0.005 percent total by weight of arsenic + antimony + thallium as determined by dc arc emission spectroscopy or equivalent analysis techniques.

2.3 Volatile material. Approximately 20 grams (g) of the specimen shall be placed in a tared porcelain crucible and weighed to the nearest milligram (mg). The crucible and contents shall

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AMSC N/A

FSC 6810

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

A-A-50800A

then be heated in a muffle furnace at  $105 \pm 5$  °C for two hours, cooled in a desiccator, and reweighed to the nearest mg. Volatile material should be calculated as follows:

$$\text{Volatile material (percent)} = \frac{A - B}{A - T} \times 100$$

Where:  $A$  = Weight of the crucible and contents before 105 °C conditioning (g)

$B$  = Final weight of the crucible and contents (g)

$T$  = Tare weight of the crucible (g)

The volatile material content of the cadmium oxide shall be not more than 0.50 percent by weight.

### 3. REGULATORY REQUIREMENTS

3.1 Material safety data sheet (MSDS). An MSDS shall be prepared and furnished in accordance with Title 29, Code of Federal Regulations, paragraph 1910.1200.

3.2 Marking, packaging, and labeling. Material shall be labeled, packed and marked in accordance with Title 49, Code of Federal Regulations, paragraphs 100 to 185.

3.3 Recycled materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practical, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

### 4. QUALITY ASSURANCE PROVISIONS

4.1 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 market. The Government reserves the right to require proof of such conformance.

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

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

### 6. NOTES

(This section contains information of a general or explanatory nature that is helpful, but is not mandatory.)

6.1 Source of government documents. Copies of federal documents referenced in this CID may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402.

A-A-50800A

6.2 Ordering data. Acquisition documents must specify the following:

- a. Title, name, and date of this specification.
- b. Unit and quantity required.
- c. Packaging requirements.

6.3 National stock number (NSN). NSN 6810-00-281-8804 corresponds to this CID. This may not be the only NSN associated with this document.

MILITARY INTERESTS:

Custodians:

Navy - AS

Air Force - 68

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 10FTE

Preparing Activity:

DLA - GS

(Project 6810-1478)