

[INCH-POUND]
A-A-59239
12 May 1998
SUPERSEDING
MIL-D-20550B
8 August 1968

COMMERCIAL ITEM DESCRIPTION

DIATOMACEOUS EARTH

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 the requirements for diatomaceous earth which is intended for use in chemical manufacturing as an inert filler and as a filter aid in filtration and purification processes. Grades B and C are also used in the formulations of pyrotechnic igniters as burning rate modifiers. This material is not intended for use in water purification equipment for field use or in paint as a pigment or filler.
2. **CLASSIFICATION.** This diatomaceous earth shall be of the following grades. The grade to be furnished shall be as specified (see 7.2).
 - Grade A - Natural
 - Grade B - Flux calcined
 - Grade C - Calcined

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

AMSC N/A

FSC 9390

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

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3. SALIENT CHARACTERISTICS

3.1 General requirements. The diatomaceous earth shall meet the requirements as specified in table I.

TABLE I. Performance requirements.

Requirement	Grade			Test method
	A	B	C	
Percent SiO ₂ on a dry basis (min)	87.0	87.0	87.0	ASTM D717
Fineness (retained on a No. 150 US std. sieve) percent (max)	3.0	7.0	10.0	ASTM C430
Fineness (retained on a No. 325 US std. sieve) percent (max)	8.0	--	--	ASTM C430
Ignition Loss (corrected for moisture) percent (max)	7.0	0.5	0.5	ASTM D1208
Moisture percent (max)	6.0	1.0	1.0	
Oil absorption (min)	139	139	139	ASTM D1483
Oil absorption (max)	230	210	210	ASTM D1483

4. REGULATORY REQUIREMENTS

4.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirement, and promotes economically advantageous life cycle costs.

4.2 Environmental protection. The item shall meet all applicable Environmental Protection Agency restrictions in effect on the date of the contract. These regulations apply to the emission of materials hazardous to the environment or the user's health and shall be met during the manufacturing, service, transportation, storage, and operation/use of the item.

5. QUALITY ASSURANCE PROVISIONS

5.1 Product conformance. The products 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.

6. PACKAGING. Preservation, packing, and marking shall be as specified (see 7.2).

7. NOTES

7.1 Sources of documents.

7.1.1 Government documents. Copies of Military and Federal documents may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

7.1.2 Industry standards. Copies of industry standards referenced in this CID may be obtained from the following address:

American Society for Testing and Materials (ASTM)

ASTM C430 Fineness of Hydraulic Cement by the 45- μ m (No. 325) Sieve

ASTM D717 Analysis of Magnesium Silicate Pigment

ASTM D1208 Common Properties of Certain Pigments

ASTM D1483 Oil Absorption of Pigments by Gardner-Coleman Method

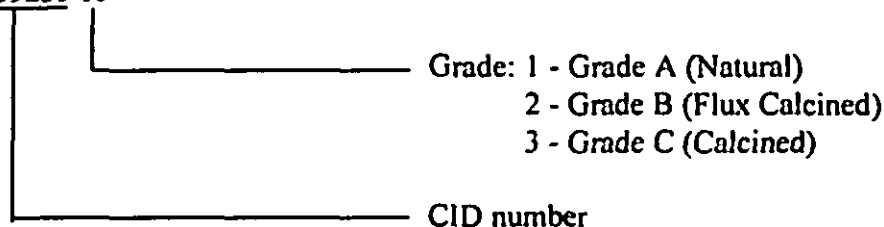
Applications for copies should be sent to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

7.2 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this document.
- b. Grade of diatomaceous earth required (see 2).
- c. Preservation, packing, and marking shall be as specified (see 6).

7.3 Part identification number (PIN). The following part identification numbering procedure is for Government purposes and does not constitute a requirement for the contractor.

AA59239-X



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MILITARY INTERESTS:

Custodians

Army - AL

Air Force - 99

Reviewers

Air Force - 84

PREPARING ACTIVITY:

DLA - GS

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