

METRIC

A-A-59303A
7 JUNE 2010
SUPERSEDING
A-A-59303
16 October 1998

COMMERCIAL ITEM DESCRIPTION

TALC, 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 three types of modified commercial grade talc. Types T1 and T3 are intended for use as stimulants for riot control agents CA (orthochlorobenzylidene malononitrile), CS1 and CS2. Type T1 is also intended for use in dusting and lubrication. Type T4, used for repairing and retreading pneumatic tires on ground vehicles, is equivalent to A-A-52518 Type IV Class B.

2. **CLASSIFICATION.** The talc shall be of the following types as specified (see 7.3)

Type T1 - 35/65 silicon dioxide

Type T3 - 55/65 silicon dioxide

Type T4 - 53 micrometer (μm)

3. SALIENT CHARACTERISTICS

3.1 Chemical and physical characteristics. Talc shall conform to the chemical and physical characteristics of Table I when tested as specified herein.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: STDZNMGT@dla.mil or Defense Supply Center Richmond (DSCR), ATTN: DSCR-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 <https://assist.daps.dla.mil>.

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TABLE I. Chemical and physical characteristics.

Characteristics	Type T1		Type T3		Type T4	Test paragraph
	Min.	Max.	Min.	Max.	Max.	
Silicon dioxide, percent by weight	35	65	55	65	-	3.2
Calcium oxide, percent by weight	-	-	-	0.30	-	3.2
Magnesium oxide, percent by weight	20	40	25	35	-	3.2
Loss on ignition, percent by weight	-	-	-	8	-	ASTM D1208 Loss on Ignition and Ash
Asbestos and other fibers	-	None detected	-	None detected	None detected	3.3
Percent by weight retained on a sieve	-	5	-	-	10	3.4
Average particle size, micrometers	-	-	-	3.5	-	3.5
Apparent density, grams per cubic centimeter	-	-	-	0.25	-	ASTM D1895 Method A

Abbreviations: Min. = minimum; Max. = maximum; ASTM – American Society for Testing and Materials

3.2 Oxide tests – x-ray fluorescence (XRF) spectrometer method.

3.2.1 Instrument calibration. Certified magnesium oxide reference materials, plus other certified reference materials, shall be used in instrument calibration. The method by which the reference materials are prepared for instrument calibration must be identical to that for all samples.

3.2.2 X-ray emission spectrometric analysis. The x-ray emission spectrometric analysis of magnesium oxide shall be performed by the same conditions and parameters established at the time of instrument calibration

3.2.3 Ignition. Samples shall be ignited to the oxide basis. Samples are then fused with lithium tetraborate, cast to form a fused glass disk, tempered and readied for x-ray analysis.

3.2.4 Magnesium oxide content. Determine magnesium oxide content of each sample. The spectrometer shall produce a report that shows the silicon dioxide, calcium oxide, and magnesium oxide content.

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3.2.5 Oxide tests – alternate method. Determine the silicon dioxide, calcium oxide, and magnesium oxide content weight of the sample in accordance with ASTM D717, Analysis of Magnesium Silicate Pigment.

3.3 Asbestos and other fibers. Talc, technical, shall be fiber free. For purposes of this test, a fiber is a particle that has a length greater than 5 micrometers and an aspect ratio (length to width ratio) of 3 or more to 1. Determine the presence of fibers in accordance with Environmental Protection Agency test method EPA/600/R-93/116, Method for the Determination of Asbestos in Bulk Building Materials.

3.4 Percent retained on sieve.

3.4.1 Percent retained on sieve, Type T1. Determine the percent by weight of specimen retained on a No. 400 (38 µm) sieve in accordance with ASTM D185, Standard Test Method for Coarse Particles in Pigments.

3.4.2 Percent retained on sieve, Type T4. Determine the percent by weight of specimen retained on a No. 270 (53µm) sieve in accordance with ASTM D185, Standard Test Method for Coarse Particles in Pigments.

3.5 Average particle size. Determine the average particle size of the specimen by a particle size analyzer using the laser diffraction principle.

3.5.1 Average particle size – alternate method. Determine the average particle size of the specimen in accordance with ASTM B330, Standard Test Method for Fisher Number of Metal Powders and Related Compounds.

4. REGULATORY REQUIREMENTS

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

4.2 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).

4.3 Material safety data sheet (MSDS). The manufacturer shall comply with requirements set forth by the Hazardous Communication Standard 29 CFR paragraph 1910.1200 (d) through (g).

5. PRODUCT CONFORMANCE 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 marketplace. The government reserves the right to require proof of such conformance.

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5.2 Market acceptability. The following market acceptability criteria are necessary to document the quality of the product to be provided under this CID:

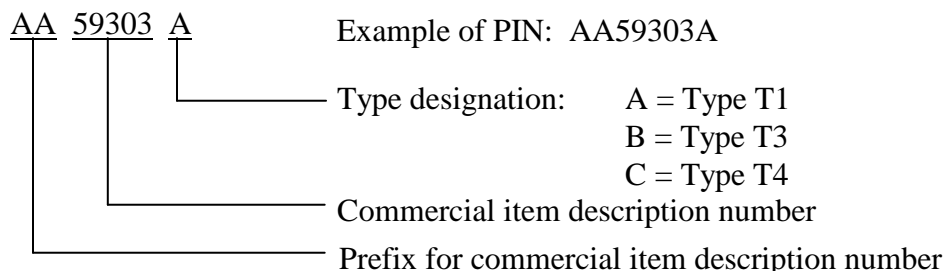
- a. The item offered must have been sold to the government within the past 2 years.
- b. The company must be able to show test data or lab results of meeting the salient characteristics of the talc.

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

6.1 Packaging requirement. Type T3 packaging in 3.6 kilogram screw-cap plastic bottles shall conform to the Purchase Description EDAR Publication 196-21-87.

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

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



7.2 Sources 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.gpoaccess.gov/cfr/>. Electronic copies of FAR documents may be obtained from <http://www.arnet.gov/far/>.

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

7.2.3 Environmental Protection Agency (EPA) methods. EPA methods are available from Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Ave, Washington, DC 20460. Electronic copies of EPA documents may be obtained from <http://www.epa.gov>.

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7.2.4 EDAR publication. Purchase Description EDAR Publication 196-21-87 is available from U.S. Army Edgewood Chemical Biological Center, Attn: RDCB-DEA-S, E3331, 5183 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5424 or by e-mail at apgr-ecbcSpecsTeam@conus.army.mil.

7.3 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this commercial item description.
- b. Type of talc required (see 2).
- c. Unit of issue and quantity.

7.4 National stock numbers (NSNs). The following NSNs correspond to this CID. They may not be indicative of all possible NSNs for this document.

TABLE II. NSNs and type.

NSN	Type
6810-00-270-9988	T4
6810-00-270-9989	T4
6810-00-270-9990	T4
6810-00-543-7612	T1
6810-01-809-9589	T1
6810-00-142-9849	T3

MILITARY INTERESTS:

Custodians:

Air Force – 68

Army – EA

Review Activity:

Army – MD1

CIVIL AGENCY
COORDINATING ACTIVITY:

GSA - FAS

Preparing Activity:

DLA - GS3

(Project 6810-2010-005)

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.daps.dla.mil/>.