

[METRIC]  
A-A-59303  
16 October 1998  
SUPERSEDING  
MIL-T-50036B  
24 December 1992

## 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 covers three types of modified commercial technical grade talc. Types T1 and T3 are intended for use as simulants for riot control agents CS (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 (supersedes ZZ-T-416 Type IV Class C).

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

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any 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.
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AMSC N/A

FSC 6810

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

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### 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.

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 D 1208 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 D 1895 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 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.

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 D 717, 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 sieve in accordance with the Procedure for Insoluble Dry Pigments, Except Metallic Aluminum and Bronze Powders in ASTM D 185.

3.4.2 Percent retained on sieve, Type T4. Determine the percent by weight of specimen retained on a No. 270 sieve in accordance with ASTM D 185.

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 the Average Particle Size of Powders of Refractory Metals and their Compounds by the Fisher Sub-Sieve Sizer, ASTM B 330.

#### 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. 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 market. The government reserves the right to require proof of such conformance.

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

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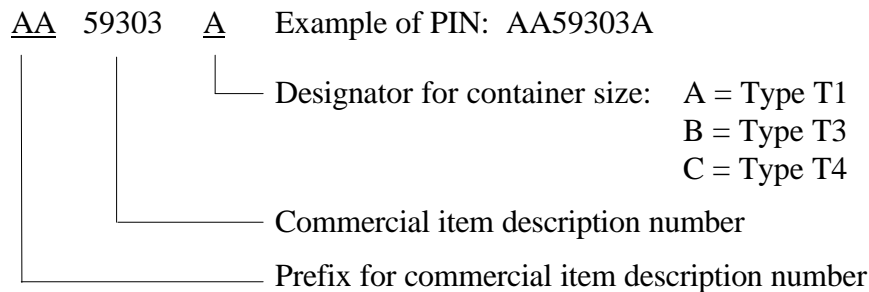
- a. The item offered must have been sold to the government within the past 2 years.
- b. The company must be able to show test data or lab results of meeting the salient characteristics of the talc.

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

6.1 **Packaging requirements.** Type T3 packaging in 3.6 kilogram screw-cap plastic bottles shall conform to 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 identification number (PIN).** The following part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor.



7.2 **Referenced documents.**

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

7.2.2 American Society for Testing and Materials standards may be obtained from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

7.2.3 Environmental Protection Agency methods are available from TSCA Assistance Information Service, US EPA, Mail Stop TS-799, Washington, DC 20460.

7.2.4 Purchase Description EDAR Publication 196-21-87 is available from Commander, US Army Edgewood Research Development and Engineering Center, ATTN: SMCCR-PET-O, Aberdeen Proving Ground, MD 21010-5423.

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 Sources of supply. The following companies produce products known to meet the commercial item description requirements. Competition is not to be limited to the suppliers on this list.

Aldrich Chemical Co.  
P. O. Box 355  
Milwaukee, WI 53201  
(414) 273-3850

Whittaker, Clark & Daniels, Inc.  
1000 Coolidge Street  
South Plainfield, NJ 07090-1000  
(800) 732-0562

7.5 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. Characteristics by NSN.

NSN	Specification	Characteristic
6810-00-142-9849	MIL-T-50036	Type T3
6810-01-080-9589	MIL-T-50036	Type T1
6810-00-270-9988	A-A-52518	Type T4
6810-00-270-9990	A-A-52518	Type T4

**MILITARY INTERESTS:**

Custodians

Air Force - 68  
Army - EA

Reviewer

Army - MD1

**CIVIL AGENCY COORDINATING ACTIVITY:**

GSA - 10FTE

Preparing Activity:  
DLA - GS

(Project 6810-1631)