

METRIC

A-A-59370
20 July 2000
SUPERSEDING
O-A-451F
27 June 1975

COMMERCIAL ITEM DESCRIPTION

AMMONIUM HYDROXIDE, TECHNICAL

The General Service Administration has authorized the use of this Commercial Item Description (CID) by all federal agencies.

1. **SCOPE.** This CID covers four types of technical grade ammonium hydroxide. The intended uses for the ammonium hydroxide are as a cleaning agent, an accelerator in vulcanization, and as a dry diazo print developer for white print machines.
2. **CLASSIFICATION.** The ammonium hydroxide, technical, shall be of the following types, as specified, (see 7.2):

Type: Type I - 26° Baumé (27 to 30 percent as ammonia (NH₃))
Type II - 21° Baumé (19 to 21 percent as NH₃)
Type III - 16° Baumé (9 to 10 percent as NH₃)
Type IV - 14° Baumé (6 to 7 percent as NH₃)

3. SALIENT CHARACTERISTICS.

3.1 Appearance. Ammonium hydroxide shall be a colorless, transparent, aqueous solution of NH₃ and water, visually free from foreign matter.

3.2 Residue after ignition. The residue after ignition shall be 0.03 percent by weight maximum. Testing shall be in accordance with the American Chemical Society (ACS) Reagent Chemicals specification for Ammonium Hydroxide, ACS.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: Defense Supply Center Richmond, Standardization Program Branch, ATTN: DSCR-VBD, 800 Jefferson Davis Highway, Richmond, VA 23297-5610 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document, or by letter.

AMSC N/A

FSC 6810

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

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3.3 Specific gravity. The specific gravity at 60°/60° F shall not exceed a maximum of 0.904 - Type I, 0.929 - Type II, 0.963 - Type III, and 0.974 - Type IV, Ammonium Hydroxide, when tested in accordance with American Society for Testing and Materials (ASTM) D1122.

3.4 Assay. Testing for assay shall be in accordance with the Ammonium Hydroxide, ACS specification outlined in the ACS Reagent Chemicals.

3.5 Nonvolatile matter. The nonvolatile matter shall not exceed 0.05 percent by weight. To determine the nonvolatile matter, retrieve approximately 25 ml of the specimen, weighed to the nearest 0.1 g, into a tared evaporating dish weighed to the nearest mg. Evaporate to dryness on a steam bath. Dry the residue to constant weight at 105° C. Cool to room temperature in a desiccator and weigh to the nearest mg. Calculate the percent by weight nonvolatile matter as: Percent nonvolatile matter = $(100 (A - B))/W$, where A = weight of dish and residue in grams, B = weight of dish in grams, and W = weight of specimen in grams.

4. REGULATORY REQUIREMENTS.

The manufacturer shall prepare and submit Material Safety Data Sheets (MSDS) and Hazardous Warning Labels (HWL) meeting the requirements of FED-STD-313 and the Code of Federal Regulations (CFR), Section 29 CFR 1910.1200.

5. PRODUCT CONFORMANCE.

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 company must be able to show test data or laboratory results of meeting the salient characteristics of technical grade ammonium hydroxide. The government reserves the right to require proof of such conformance.

6. PACKAGING.

6.1 Packaging. Preservation, packing, and marking shall be as specified in the contract or order (see 7.1).

6.2 Precautionary marking. Each unit container shall be durably and legibly marked to show the following special information:

Warning! Poison! Corrosive!
Liquid causes burns
Vapor extremely irritating

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Avoid breathing vapor. Avoid contact with eyes, skin and clothing. In case of product, immediately flush skin or eyes with plenty of water for at least 15 minutes; for eyes, get medical attention. **HANDLING & STORAGE:** Use care in opening this container as a portion of the contents may blow out violently due to the pressure of the ammonia gas; safety goggles or a face shield must be worn. Place a cloth over the cap or stopper before removal. It is also advisable to cool container before opening, especially during warm seasons. Keep well closed and in cool place.

7. NOTES.

7.1 Ordering data. Acquisition document must specify the following:

- a. Title, number, and date of this document.
- b. Part identification number.
- c. Quantity and size of container required.
- d. Packaging and special marking (see 6.1 and 6.2).

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

A-A-59370	-	X	-	X - Quantity	A - 16 ounces
CID Number					B - 32 ounces
					C - 80 ounces
					D - 128 ounces
				Type I	- Ammonium Hydroxide, Technical (26° Baumé)
				II	- Ammonium Hydroxide, Technical (21° Baumé)
				III	- Ammonium Hydroxide, Technical (16° Baumé)
				IV	- Ammonium Hydroxide, Technical (14° Baumé)

7.3 National stock numbers (NSNs). The following is a list of assigned NSNs, which correspond to this CID. This list may not be indicative of all possible NSNs associated with this document.

NSN	TYPE
6810-00-584-3793	I (16 Ounces)
6810-00-222-9643	I (80 Ounces)
6810-00-817-9929	I (128 Ounces)
6810-00-527-2476	II (32 Ounces)

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7.4 Sources of referenced documents. Copies of referenced documents are available from:

Federal document:

Defense Automated Printing Service (DAPS)
Building 4D, NPM-DODSSP
700 Robbins Avenue
Philadelphia, PA 19111-5094

American Society for Testing and Materials (ASTM) documents:

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, Pa. 19428-2959

ACS documents:

American Chemical Society
1155 16th Street, NW
Washington, DC 20036

CFR document:

US Government Printing Office
Superintendent of Documents
Washington, DC 20402-9328

CIVIL AGENCY COORDINATING ACTIVITY:
GSA/FSS

Preparing Activity:
DLA-GS

(Project 6810-1612)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER
A-A-59370

2. DOCUMENT DATE (YYYYMMDD)
20000720

3. DOCUMENT TITLE AMMONIUM HYDROXIDE, TECHNICAL

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)
(1) Commercial
(2) AUTOVON
(if applicable)

7. DATE SUBMITTED
(YYYYMMDD)

8. PREPARING ACTIVITY

a. NAME DEFENSE SUPPLY CENTER RICHMOND

b. TELEPHONE (Include Area Code)
(1) Commercial (804) 279-5019
(2) AUTOVON 695-5019

c. ADDRESS (Include Zip Code)
STANDARDIZATION PROGRAM BRANCH
ATTN: DSCR-VBD, 800 JEFFERSON DAVIS HIGHWAY
RICHMOND, VA 23297-5610

IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:
Defense Standardization Program Office (DLSC-LM)
8725 John J. Kingman road, Suite 2533, Ft. Belvoir, VA 22060-2533
Telephone (703) 767-6888 AUTOVON 427-6888