

Metric  
A-A-132B  
December 10, 1992  
Superseding  
A-A-132A  
November 7, 1988

## COMMERCIAL ITEM DESCRIPTION ERASERS

The General Services Administration, Office Supplies and Paper Products Commodity Center, New York, NY 10278, has authorized the use of this commercial item description.

### 1. Salient Characteristics

A. Erasers shall comply with the criteria specified in Table I and shall erase *satisfactorily* for the purpose intended under normal erasing conditions.

B. Durometer Hardness. Erasers shall be of the hardness specified in Table II when tested in accordance with ASTM D 2240. For cylindrical erasers (Items Nos. 1,2,7,8,9,13, & 15), eraser shall be tested in accordance with the test procedures stated in section 4.

C. Durometer Hardness After Accelerated Aging. The erasers shall be tested and evaluated after accelerated aging in accordance with the test procedures stated in section 4.

Workmanship. Erasers shall be uniform in quality, smooth and free of dirt, foreign matter, and stains or any ingredient which causes a discoloration or marking of the paper upon which erasure is performed.

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| Beneficial comments, recommendations, additions, deletions, clarification's, etc. and any data which may improve this document should be sent to General Services Administration, Federal Supply Service, Engineering Branch, 26 Federal Plaza, New York, NY 10278. |
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## 2. Tables:

Table I.

| Item No | Purpose, type and shape  | Descriptive dimensions<br>Minimum cm/in.                             | Minimum Volume<br>cubic cm <sup>3</sup> /in <sup>3</sup> | Other Characteristics   |
|---------|--|--|--|---|
| 1.      | Pencil; soft; cylindrical  | 3.18 cm<br>1 1/4 in. long;<br>0.762 cm<br>0.300 in dia.              | 1.44 cm <sup>3</sup><br>0.088 in. <sup>3</sup>           | Designed for use in electric erasing machines. *  |
| 2.      | Pencil; regular; cylindrical   | 15.24 cm<br>6 in. long;<br>0.475 cm<br>3/16 in dia.;<br>eraser core. | 2.72 cm <sup>3</sup><br>0.166 in. <sup>3</sup>           | Paper-cased. wood-cased plastic holder.*  |
| 3.      | Pencil; regular; rectangular   | 7.0 cm x<br>1.91 cm x 0.64 cm<br>2 3/4 in. x<br>2/4 in. x 1/4 in.    | 8.46 cm <sup>3</sup><br>0.516 in. <sup>3</sup>           | Beveled ends.   |
| 4.      | Pencil; regular; conical or arrow head, wedge or chisel shaped       | -----  | -----  | Eraser fits over end of standard writing pencil 0.714 cm<br>9/32 in. dia. ferrule.  |
| 5.      | Pencil; rubber; substitute; mechanical pencil and replacement eraser | -----  | -----  | Eraser must fit Scripto Long Lead Mechanical Pencil K-770 & the following Skillcraft Mechanical Pencils:<br>7520-00-164-8950<br>7520-00-268-9915<br>7520-00-268-9916<br>7520-01-347-9581<br>7520-01-354-2304<br>7520-01-354-2305<br>Replacement Eraser<br><u>7510-00-307-7885</u> |

Table I.  
(cont.)

| Item No | Purpose, type and shape                               | Descriptive dimensions<br>Minimum cm/in.                               | Minimum Volume<br>cubic cm <sup>3</sup> /in. <sup>3</sup> | Other Characteristics   |
|---------|---|--|---|---|
| 6.      | Pencil; regular; mechanical pencil replacement eraser | -----  | -----   | Eraser must fit Auto-point's Slim Utility Mechanical Pencil No. 106.              |
| 7.      | Typewriter and ink; cylindrical                       | 6.91 cm<br>2 23/32 in. long<br>0.30 cm<br>0.120 in dia.                | 0.51 cm <sup>3</sup><br>0.031 in. <sup>3</sup>            | Designed for use in mechanical eraser barrels.                                    |
| 8.      | Typewriter and ink; cylindrical                       | 3.18 cm<br>1 1/4 in. long;<br>0.76 cm<br>0.300 in. dia.                | 1.44 cm <sup>3</sup><br>0.088 in. <sup>3</sup>            | Designed of use in electric erasing machines. *                                   |
| 9.      | Typewriter and carbon; cylindrical                    | 15.24 cm<br>6 in. long;<br>0.47 cm<br>3/16 in. dia.<br>eraser core     | 2.72 cm <sup>3</sup><br>0.166 in. <sup>3</sup>            | One end (half) type-writer eraser and one end (half) carbon eraser; wood-cased. * |
| 10.     | Cleaning; rubber; rectangular                         | 5.08 cm x<br>2.22 cm x 1.91 cm<br>2 in. x<br>7/8 in. x 1 1/8 in.       | 21.47 cm <sup>3</sup><br>1.31 in. <sup>3</sup>            | -----   |
| 11.     | Cleaning; rubber; substitute; rectangular             | 5.72 cm x<br>2.86 cm x 2.86 cm<br>2 1/4 in. x<br>1 1/8 in. x 1 1/8 in. | 46.67cm <sup>3</sup><br>2.848 in. <sup>3</sup>            | Gum-type composition.   |
| 12.     | Cleaning; kneaded rubber rectangular                  | 4.13 cm x<br>3.02 cm x 0.95 cm<br>1 5/8 in. x<br>1 3/16 in. x 3/8 in.  | 11.86 cm <sup>3</sup><br>0.724 in. <sup>3</sup>           | -----   |

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Table I.  
(cont.)

| Item No | Purpose, type and shape   | Descriptive dimensions<br>Minimum cm/in.                             | Minimum Volume<br>cubic cm <sup>3</sup> /in <sup>3</sup> | Other Characteristics  |
|---------|---|--|--|--|
| 13.     | Cleaning; direct image paper offset master; cylindrical               | 17.78 cm<br>7 in. long;<br>0.475 cm<br>3/16 in. dia.<br>eraser core. | 3.16 cm <sup>3</sup><br>0.193 in. <sup>3</sup>           | Paper-cased;<br>Wood-cased or<br>Plastic holder. *   |
| 14.     | Cleaning; plastic; drafting paper, films and vellums rectangular      | 5.72 cm x<br>2.22 cm x 1.12 cm<br>2 1/4 in. x<br>7/8 in. x 7/16 in.  | 14.1 cm <sup>3</sup><br>0.86 in. <sup>3</sup>            | Beveled ends.  |
| 15.     | Cleaning; plastic; drafting paper, films and vellums; cylindrical     | 15.88 cm<br>6 1/4 in. long;<br>0.290 in. dia.;<br>eraser core        | 6.77 cm <sup>3</sup><br>0.413 in. <sup>3</sup>           | Paper-cased,<br>Wood-cased or<br>plastic holder. *   |
| 16.     | Pencil; regular; cylindrical replacement eraser                       | -----  | -----  | Eraser must fit<br>SKILLCRAFT's NSN<br>7520-00-590-1878<br>0.5 mm and NSN<br>7520-01-132-4996<br>0.7 mm lead holder<br>with sliding sleeve.<br>Replacement eraser<br><u>7510-00-318-8641</u> |
| 17.     | Pencil; rubber; substitute; mechanical pencil and replacement eraser. | -----  | -----  | Eraser must fit<br>SKILLCRAFT's 0.9<br>mm Mechanical<br>Pencil NSN<br>7520-00-161-5664,<br>Replacement Eraser<br><u>7510-01-332-8794</u>   |

Table I. (cont.)

| Item No | Purpose, type and shape                                    | Descriptive dimensions | Minimum Volume                         | Other Characteristics   |
|---------|--|------------------------|--|---|
|         |  | Minimum cm/in.         | cubic cm <sup>3</sup> /in <sup>3</sup> |   |
| 18.     | Pencil; rubber; substitute; cylindrical replacement eraser | -----                  | -----                                  | Eraser must fir<br><b>SKILLCRAFT's</b> NSN<br>7520-01-317-6428<br>0.5 mm and<br>7520-01-317-6140<br>0.7 mm dual action<br>mechanical pencil<br>replacement eraser<br>7510-01-317-4222 |

Note - All dimensions are minimum, except:

\* - Minus tolerance of 0.051 cm (0.020 inch) is allowed for the diameter.

# - Minus tolerance of 0.013 cm (0.005 inch) is allowed for the diameter.

Table II

| Purpose and Type                  | Hardness |         |
|-----------------------------------|----------|---------|
|                                   | Minimum  | Maximum |
| Pencil:                           |          |         |
| Soft                              | 30       | 50      |
| Regular                           | 50       | 75      |
| Rubber Substitute                 | 65       | 90      |
| Typewriter, Ink & Carbon:         |          |         |
| Typewriter                        | 70       | 85      |
| Ink                               | 75       | 90      |
| Carbon                            | 60       | 75      |
| Cleaning:                         |          |         |
| Rubber                            | 25       | 50      |
| Rubber Substitute                 | 30       | 40      |
| Kneaded Rubber                    | --       | --      |
| Direct-Image Paper Offset Master  | 55       | 70      |
| Drafting Paper, Films and Vellums | 42       | 52      |

**A-A-132B****3. Quality Assurance**

**Responsibility for Inspection.** Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the government. The government reserves the right to perform any of the inspections set forth in the Commercial Item description, where such inspections are deemed necessary to assure that supplies and services conform to the prescribed requirements.

Each lot of erasers shall be inspected for conformance to the requirements herein. Inspection shall be in accordance with MIL-STD-105E using the sampling plans specified below.

**A. Visual Characteristics.** - Inspection Level S-4 with an Acceptable Quality Level (AQL) of 4.0 percent defective. The sample unit shall be one eraser.

**B. Dimensional Characteristics.** - Inspection Level S-4 with an Acceptable Quality (AQL) of 4.0 percent defective. The sample unit shall be one eraser.

**C. Tests.** - Inspection Level S-2 with an AQL of 4.0 percent defective, for each test. The sample unit shall be one eraser.

**D. Packaging, Packing, and Marking.** - Inspection Level S-2 with an AQL of 4.0 percent defective. The sample unit shall be one fully prepared shipping container.

**4. Recovered Materials**

The manufacturer shall utilize recovered materials to the maximum extent practicable.

**5. Tests****A. Durometer Hardness for Cylindrical Erasers (Item Nos. 1,2,7,8,9,13 & 15 as applicable)**

**Preparation of Specimens for Test.** Eraser units shall be taken at random from each lot for preparation of test-unit specimens, in accordance with the sampling plan listed in section 3, for test as specified in the paragraph below. (A lot shall consist of all erasers of the size offered for delivery at on time). Cased and non-cased cylindrical erasers not cut square or if cone shaped at the ends shall be squared transverse to the longitudinal axis of the eraser (NOTE. Any unevenness of the test surface of the eraser will cause an inaccurate reading). Specimens of double-end wood-cased eraser units shall be prepared at each end of the eraser unit.

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**Method of Test.** A shore durometer, type 2, Code XACL Modified with sleeve as detailed in Figure I, shall be used in making the hardness determination for cylindrical erasers. Durometer and sleeve may be mounted on wooden sleeve (See Figure II). Each eraser unit shall be prepared as described in the above paragraph. Insert cased erasers into sleeve and with normal pressure push eraser unit it is flat against base of gauge. Indentation reading shall be taken immediately. Un-cased erasers shall be inserted in tubing or in an eraser holder, or by other adequate means, in a manner that the eraser will not creep or slide down when inserted in sleeve for hardness test. Hardness determination shall be made and the value recorded to the nearest whole scale unit.

**Results.** The hardness of the test unit shall be recorded to the nearest whole scale reading.  
(NOTE: For definitions of terms ass ASTM D 1566)

**B. Accelerated Aging.** Erasers shall be exposed in circulating air as described in ASTM method D 573 or D 865. After the aging, the erasers shall then be examined. The hardness of the erasers shall not increase by more than 12 points and shall also erase satisfactorily under normal usage conditions.

## 6. Preparation for Delivery

### Packaging, Packing & Marking

Packaging, packing & marking of the erasers shall be as specified in the contract or purchase order.

**7. Application for copies of technical documents referenced herein:** The issue date in effect on date of invitation for bids or request for proposal shall apply.

### A. Military Specifications:

MIL-STD-105 - Sampling Procedures and Table for Inspection by Attributes

Available from: Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094

### B. American Society for Testing and Material's (ASTM):

ASTM D 573 - Standard Test Method for Rubber - Deterioration in an Air Oven  
ASTM D 865 - Standard Test Method for Rubber - Deterioration by heating in Air  
(Test Tube Enclosure)  
ASTM D 1566 - Standard Terminology Related to Rubber  
ASTM D 2240 - Standard Test Method for Rubber Property - Durometer Hardness

Applications for copies should be addressed to: The American Society for Testing and Materials; 1916 Race Street; Philadelphia, PA 19103.

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8. Notes:

A. Ordering Data:

Purchasers should select the preferred options permitted herein, and include the following information in procurement documents:

1. Type of eraser.
2. Packaging, packing and marking.

B. Item Identifiers Reference Part Number System (For Cataloging Use Only)

Part Reference Number:

AA132-1 :This example describes a

- 1 - Pencil; soft; cylindrical
- 2 - Pencil; regular; cylindrical
- 3 - Pencil; regular; rectangular
- 4 - Pencil; regular; conical or arrow head, wedge or chisel shaped
- 5 - Pencil; rubber; substitute; mechanical pencil and replacement eraser
- 6 - Pencil; regular; mechanical pencil replacement eraser
- 7 - Typewriter and ink; cylindrical
- 8 - Typewriter and ink; cylindrical
- 9 - Typewriter and carbon; cylindrical
- 10 - Cleaning; rubber; rectangular
- 11 - Cleaning; rubber substitute; rectangular
- 12 - Cleaning; kneaded; rubber; rectangular
- 13 - Cleaning; direct image paper offset master; cylindrical
- 14 - Cleaning; plastic; drafting paper, films and vellums; rectangular
- 15 - Cleaning; plastic; drafting paper, films and vellums; cylindrical
- 16 - Pencil; regular; cylindrical; replacement eraser
- 17 - Pencil; rubber; substitute; mechanical pencil and replacement eraser
- 18 - Pencil; rubber; substitute cylindrical; replacement eraser

MILITARY INTEREST:

NONE: DoD has no registered interest in revisions and amendments to this Commercial Item Description until further notice.

PREPARING ACTIVITY:

GSA-FSS