SS-C-635b December 7, 1966

SUPERSEDING

Int. Fed. Spec. SS-C-00635a(GSA-FSS) July 30, 1965

FEDERAL SPECIFICATION -

CRAYON ASSORTMENT, DRAWING, COLORED

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers the requirements for cylindrical, hexagonal, or cylindrical with one flat side colored crayons for drawing on paper, cardboard, wood, or fabric.

1.2 Classification.

1.2.1 Type, grade, and composition. Drawing crayons shall be of but one type (see 1.1), and of the following grades and compositions:

Grade A-Pressed crayon (pressure extruded).

Composition I—Clay base. Grade B—Molded crayon. Composition I—Wax base.

1.2.2 Sizes and color (see 3.5).

2. APPLICABLE DOCUMENTS

2.1 Specifications and standards. The following specifications and standards, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

Federal Specifications:

UU-P-268—Paper, Kraft, Untreated, Wrapping.

PPP-B-566—Boxes, Folding, Paper-board.

PPP-B-636-Box, Fiberboard.

PPP-B-665—Boxes; Paperboard, Metal Stayed (Including Stay Material).

PPP-B-676—Boxes, Setup.

Federal Standard:

Fed. Std. No. 123—Marking for Domestic Shipment (Civilian agencies).

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

(Single copies of this specification and other product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kansas City, Mo., Dallas, Denver, San Francisco, Los Angeles, and Seattle, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Standards:

MIL-STD-105—Sampling Procedures and Tables for Inspection by Attributes.

MIL-STD-129—Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following document forms a part of this specification. Unless otherwise indicated, the issue in effect on date of invitation for bids shall apply?

Commercial Standard:

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CS130—Color Materials for Art Edu-

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cation in Schools, U. S. Department of Commerce.

(Unless otherwise specified by contractual agreement with the Federal Government, copies of this publication may be obtained through purchase from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402. Orders for this publication shall be accompanied by remittance in full, made payable to the Superintendent of Documents,)

3. REQUIREMENTS

- 3.1 Composition. The composition of the crayons shall be uniform throughout with respect to hardness, color intensity, and marking qualities. The crayons shall be free from grit or other foreign substances which might impair their serviceability.
- 3.1.1 Grade A. Grade A crayons shall be pressed (extruded under pressure), and shall be composed of water insoluble type waxes, quality pigments, and a clay base (filler), to produce smooth and uniform marking qualities specified in 3.6.
- 3.1.2 Grade B. Grade B crayons shall be molded and shall be composed of water insoluble type waxes and high quality pigments to produce smooth and uniform marking qualities specified in 3.6.
- 3.2 Toxicity. The crayons, as prescribed by CS130, shall contain no toxic materials in sufficient quantities to be injurious to the human body. Compliance shall be indicated on unit packaging by label or imprint.
- 3.3 Shape. Unless otherwise specified (see 6.1), crayons shall be either cylindrical, hexagonal, or cylindrical with one flat side. Each shape is to contain an equivalent amount of material by volume, using the cylindrical stick as a basis, with a tolerance of plus or minus 5 percent by volume. Crayons shall be provided with a point at one end. Points shall be formed by tapering one end approximately 1/4 inch in length for the 5/16 inch cross section crayons, and approximately 1/2 inch in length for the 7/16 inch cross section crayons. Point width shall be in accordance with the manufacturer's

normal practice. The opposite end of the crayons shall be approximately at right angles to the sides.

3.4 Breaking strength. Breaking strength of crayons shall be as indicated in table I (see 4.4).

Table I. Sizes, breaking strength, and colors of crayons

Length (min.)	Minimum diameter or width (width is dimension	Breaking strength) (min.)	Composi- tion	Assort- ment colors
Inches	across flats) Inch	Pounds	ļ 	\
:04 <u>8</u> 2				Black
3-1/2	5/16 ·	4.0	Grade A	Blue
4-0	7/16	5.5	Grade A	Brown
3-1/2	5/16	2.0	Grade B	Green
4-0	7/16	3.5	Grade B	Orange
				Red
				Violet
				Yellow

- 3.5 Sizes and colors. Crayons shall be not less than the minimum sizes (length, diameter, or width), shown in table I, as specified (see 6.1). Crayon assortment shall consist of the colors shown in table I.
- 3.6 Color rub out. When tested in accordance with 4.5, all colors in the assortment shall have rub out characteristics which are smooth and deposit color readily without scratching. The crayons shall distribute color uniformly with a minimum of streaking, flaking, or piling.
- 3.7 Chroma. Crayon colors cited in table I shall not fall below the Munsell chroma requirements specified in table 1 of CS130.
- 3.8 Wrapper. Each crayon shall be wrapped in a durable paper wrapper which shall be securely fastened to the crayon. The wrapper shall cover the sides of the crayon except that it shall be approximately 1/2 inch from the pointed end.
- 3.9 Identification marking. Unless otherwise specified, crayons shall be marked with the name of the manufacturer, or trademark if of sufficiently known character to

be readily identified, and marked or presented in accordance with standard commercial practice to clearly indicate the color of the crayon. Any additional standard commercial marking will be acceptable.

3.10 Workmanship. The workmanship shall be in accordance with standard commercial practice and crayons shall be free from breaks, cracks, chips, pinholes, and any other imperfections or defects which might affect appearance or serviceability.

4. QUALITY ASSURANCE PROVI-SIONS

4.1 Supplier's responsibility. Unless otherwise specified (6.1), the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own or any other inspection facilities and services acceptable to the Government. Inspection records of the examinations and tests shall be kept complete and available to the Government as specified in the contract or order. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Lot. A lot shall consist of all drawing crayons of one grade, composition, and size offered for delivery at one time.

4.3 Sampling.

4.3.1 Sampling for tests and visual examination of crayons. A random sample of crayons shall be taken from each lot. The sample unit shall be one crayon. The sample size shall be in accordance with inspection level S-3 of MIL-STD-105. The sample size shall contain as many sets (8 sample units), of the assortment colors cited in table I, as the sample size will permit.

4.3.2 Visual and dimensional examination of crayons. Visual and dimensional examinations of crayons shall be in accordance with the classification of defects listed in table II. The acceptable quality level (AQL) shall be 4.0 percent defective for major defects and 6.5 percent defective for minor defects.

Table II. Classification of defects

Examine	Defects	Category	
Examine	Defects	Major	Minor
Color	Not as specified	X	
Size	Less than length specified Less than diameter	x	
	or width specified	X	
Shape	Not as specified	X	
Wrapper	Not as specified	X	•
Identifica- tion mark- ing	Not as specified		X
Workman- ship	Any defects which impair service-ability	x	İ
	Affect appearance .		X

4.3.3 Sampling for test. Sample size for tests shall be in accordance with MIL-STD-105, inspection level S-3. The AQL shall be 4.0 percent defective.

4.3.4 Inspection of preparation for delivery requirements. An inspection shall be made to determine that the packaging, packing, and marking comply with the requirements in section 5. Defects shall be scored in accordance with table III. For examination of interior packaging, the sample unit shall be one shipping container fully prepared for delivery, selected at random just prior to the closing operations. Sampling shall be in accordance with MIL-STD-105. Defects of closure listed shall be examined on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 with an AQL of 4.0 defects per hundred units.

TABLE III. Classification of preparation for delivery defects

Examine	Defects		
Markings (ex- terior and interior)	Omitted; incorrect; illegible; improper size, location, sequence, or method of application.		
Materials	Any component missing or damaged.		
Workmanship	Inadequate application of compo- nents such as incomplete closure of container flaps, loose strapping, inadequate stapling. Distortion of		
* 1	container.		

- 4.4 Breaking strength. Test temperature shall be between 70° and 75°F. Crayon wrapper shall be removed prior to test. The crayon shall be supported in a horizontal position and equally at each end by two parallel rods 1/4 inch in diameter and 2-1/2 inches apart. Breaking strength load as specified in table I, shall be applied gradually perpendicular to the axis of the crayon at the center and perpendicular to the plane of the support rods by means of a 1/4-inch-diameter rod placed parallel to the support rods.
- 4.5 Rub out. Using newsprint as specified in rub out test of CS130, fill in an area approximately 3 by 4 inches with color making a solid patch. Examine for compliance with 3.6.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A, B, or C, as specified (see 6.1).

5.1.1 Level A.

- 5.1.1.1 Unit packaging. Eight crayons of one grade and size in assorted colors as specified in table I, shall be packaged in a closefitting box conforming to PPP-B-566, PPP-B-665 or PPP-B-676.
- 5.1.1.2 Intermediate packaging. Twelve unit packages of crayons of one grade and size shall be intermediate packaged in a box conforming to PPP-B-566, PPP-B-665, or PPP-B-676. Alternatively, the unit packages may be wrapped in paper conforming to UU-P-268, grade B.

- 5.1.2 Level B. The crayons shall be packaged as specified in 5.1.1.1 and 5.1.1.2.
- **5.1.3** Level C. The crayons shall be packaged in accordance with the supplier's commercial practice.
- 5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.1).
- 5.2.1 Level A. Intermediate packages of crayons of one grade and size in quantities as specified (see 6.1), shall be packed in a close-fitting box conforming to PPP-B-636, class weather-resistant. The box shall be closed and strapped in accordance with the appendix to the box specification.
- 5.2.2 Level B. Intermediate packages of crayons of one grade and size in quantities as specified (see 6.1), shall be packed in a close-fitting box conforming to PPP-B-636, class domestic. The box shall be closed in accordance with the appendix to the box specification.
- 5.2.3 Level C. The crayons shall be packed to insure carrier acceptance and safe delivery to destination in containers complying with the rules and regulations applicable to the mode of transportation.

5.3 Marking.

- 5.3.1 Civil agencies. In addition to markings required by the contract or order, the intermediate packages and shipping containers shall be marked in accordance with Fed. Std. No. 123.
- 5.3.2 Military agencies. In addition to markings required by the contract or order, the intermediate packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

- 6.1 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:
 - (a) Title, number, and date of this specification.

- (b) Grade and composition (see 1.2.1).
 - (c) Size (see 3.5).
 - (d) Inspection responsibility (for civil agencies only), if other than as specified herein; and administrative provisions for inspection records, when applicable (see 4.1).
 - (e) Selection of applicable levels of packaging and packing required (see 5.1 and 5.2).
 - (f) Intermediate quantities required in shipping container (see 5.2.1 and 5.2.2).
- 6.2 Federal specifications do not include all types, classes, grades, etc., of the commodities indicated by the titles of the specifications, or which are commercially avail-

able, but are intended to cover the types, etc., which are suitable to Federal Government requirements.

6.3 It is believed that this specification adequately describes the characteristics necessary to secure the desired material, and that normally no samples will be necessary prior to award to determine compliance with this specification. If, for any particular purpose, samples with bids are necessary, they should be specifically asked for in the invitation for bids, and the particular purpose to be served by the bid sample should be definitely stated, the specification to apply in all other respects.

MILITARY INTERESTS:

DOD coordination has been waived.

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein. Price 5 cents each.