

DEPARTMENT OF COMMERCE

BUREAU OF STANDARDS

George K. Burgess, Director

CIRCULAR OF THE BUREAU OF STANDARDS, No. 196

[Issued January 9, 1925]

UNITED STATES GOVERNMENT MASTER SPECIFICATION FOR
BLACK WATERPROOF DRAWING INK

FEDERAL SPECIFICATIONS BOARD SPECIFICATION No. 265

This specification was officially promulgated by the Federal Specifications Board on December 6, 1924, for the use of the Departments and Independent Establishments of the Government in the purchase of black waterproof drawing ink.

CONTENTS

	Page.
I. Type	1
II. Material and workmanship.....	1
III. General requirements.....	1
IV. Detail requirements.....	2
V. Method of inspection and tests.....	2
1. Method of taking samples.....	2
2. Tests	2
VI. Packing and marking.....	3
VII. Additional information.....	3
VIII. General specifications.....	3

I. TYPE

The ink shall be of the following type: Black, waterproof drawing ink.

II. MATERIAL AND WORKMANSHIP

None specified.

III. GENERAL REQUIREMENTS

The ink shall be an aqueous suspension of carbon black with the necessary ingredients to prevent separation or settling out of the

pigment. It shall contain a sufficient amount of a suitable antiseptic to prevent the growth of mold.

IV. DETAIL REQUIREMENTS

None specified.

V. METHOD OF INSPECTION AND TESTS

1. METHOD OF TAKING SAMPLES

A three-fourths-ounce sample of the ink in an original unopened container bearing all of the manufacturer's marks shall be sent to the testing laboratory.

2. TESTS

(1) After standing undisturbed for two weeks in a closed container, there shall be no deposit on the sides or bottom of the container.

(2) Marks shall be made on tracing cloth and drawing paper in the usual way with a drawing pen so regulated that the mark shall be approximately one sixty-fourth of an inch in width. The ink shall flow freely and smoothly from the pen.

(a) Ten minutes after the marks have been made they shall be rubbed gently with the finger tips. There shall be no blurring or smudging.

(b) When the marks have been allowed to dry for one hour they shall be examined for color and opacity. They shall be of an intense black color and shall be absolutely opaque when the tracing cloth is held close to a bright light.

(c) The paper and tracing cloth shall be cut into inch-wide strips at right angles to the marks. Some of the strips shall be kept away from light and fumes, and others used for making the following tests:

After exposure to direct sunlight for 96 hours, or at a distance of about 10 inches from an arc or ultra-violet light for 48 hours, the marks shall show no fading.

Strips of the drawing paper shall be soaked in water, gasoline, benzene (benzol), and carbon tetrachloride for 15 minutes at room temperature. The marks shall show no running or smearing.

(d) Five cubic centimeters of the sample, in a 50 cc beaker, shall be inoculated with spores of the common green mold and then kept in a moist chamber for two weeks at laboratory temperature. At the end of that time the ink shall show no growth of mold, no thickening, and no separation of the pigment.

VI. PACKING AND MARKING

None specified.

VII. ADDITIONAL INFORMATION

None specified.

VIII. GENERAL SPECIFICATIONS

None specified.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
5 CENTS PER COPY
▽



