

MIL-B-3473**23 APRIL 1951****SUPERSEDING****Army 10-2703****24 June 1939****MILITARY SPECIFICATION****BEAD, GLASS**

This specification was approved by the Departments of the Army, the Navy, and the Air Force for use of procurement services of the respective Departments.

1. SCOPE

1.1 This specification covers glass beads for laboratory use.

2. APPLICABLE SPECIFICATIONS AND OTHER PUBLICATIONS

2.1 Specifications. — The following specifications, of the issue in effect on date of invitation for bids, form a part of this specification:

FEDERAL SPECIFICATIONS

NN-B-601 — Boxes; Wood - Cleated-Plywood, for Domestic Shipment.

NN-B-621 — Boxes; Wood, Nailed and Lock-Corner.

NN-B-631 — Boxes; Wood, Wirebound, for Domestic Shipment.

LLL-B-631 Boxes; Fiber, Corrugated (for Domestic Shipment).

LLL-B-636 — Boxes; Fiber, Solid (for Domestic Shipment).

MILITARY SPECIFICATIONS

JAN-P-105 — Packaging and Packing for Overseas Shipment—Boxes, Wood, Cleated, Plywood.

JAN-P-106 — Packaging and Packing for Overseas Shipment—Boxes; Wood, Nailed.

JAN-B-107 — Boxes, Wood, Wirebound (Overseas Type).

JAN-P-125 — Packaging and Packing for Overseas Shipment — Barrier-Materials, Waterproof, Flexible.

JAN-P-140 — Packaging and Packing for Overseas Shipment — Adhesives, Water-Resistant, Case-Liner.

MIL-M-3157—Marking of Domestic Shipments by Contractors for Supplies and Equipment Consigned to the Medical Departments of the Armed Services.

(Copies of specifications should be obtained from the procuring agency or as directed by that agency. Both the title and identifying number or symbol should be stipulated when requesting copies.)

2.2 Other publications. — The following publication, of the issue in effect on date of invitation for bids, forms a part of this specification:

UNITED STATES PHARMACOPOEIAL CONVENTION PUBLICATION**United States Pharmacopoeia.**

(Copies of United States Pharmacopoeial Convention publication may be obtained upon application to the Mack Printing Company, Easton, Pa.)

3. REQUIREMENTS

3.1 Material. — Material shall be borosilicate glass.

3.1.1 Chemical durability. — Glass shall be of such composition that when tested as

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specified in 4.3.1, not more than 1.0 cc. of fiftieth normal sulfuric acid is consumed.

3.2 Description.—Beads shall be round, of solid glass, approximately 5 mm. in diameter, and shall be furnished in units of 1 pound.

3.3 Workmanship.—Workmanship shall be first class throughout. Beads shall be free from defects which detract from their appearance or may impair their serviceability.

4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 Sampling. — Unless otherwise specified, samples shall be submitted in accordance with instructions furnished by the procuring activity.

4.2 Inspection. — Samples shall be inspected for material, chemical durability, description, and workmanship.

4.3 Test.

4.3.1 Chemical durability.—Beads shall be subjected to the "Powdered Glass Test" in accordance with requirements for type I glass of the current edition of the United States Pharmacopoeia.

5. PREPARATION FOR DELIVERY

5.1 Packaging.

5.1.1 Unit packaging.—One pound of beads, as specified, constitutes one unit. Each unit shall be packaged in a solid fiberboard or double-faced corrugated fiberboard carton, of appropriate size and design, constructed in accordance with Specification LLL-B-631 or LLL-B-636. Each carton shall be adequately secured to prevent accidental opening.

5.2 Packing.

5.2.1 For domestic shipment.—Forty-eight unit cartons (48 units) shall be overpacked

in an exterior container constructed in accordance with Specification NN-B-601, NN-B-621, or NN-B-631.

5.2.2 For overseas shipment.—Forty-eight unit cartons (48 units) shall be overpacked in an exterior container designed for type 2 load, and constructed in accordance with Specification JAN-P-105, JAN-P-106, or JAN-B-107. Closure and strapping shall comply with appendix of applicable specification. Each box shall be lined with a waterproof barrier (bag) conforming to Specification JAN-P-125. Closures shall be completely sealed by a continuous seam of water resistant adhesive at least $\frac{3}{4}$ inch wide and conforming to Specification JAN-P-140.

5.2.3 Packing variation permitted. — If the number of units in any shipment is not the exact multiple of the number of units specified to be contained in each shipping container, the units not constituting the nearest such multiple shall be packed in an exterior container of suitable size and design and so constructed as to insure safe delivery to specified destination.

5.3 Marking.

5.3.1 Interior packages.—Each unit carton shall be marked with stock number, nomenclature, unit, quantity, and name of contractor.

5.3.2 Shipping container.—Shipping container shall be marked in accordance with Specification MIL-M-3157.

6. NOTES

6.1 Ordering data. — Procurement documents should specify the following:

- a. Title, number, and date of this specification.
- b. Sampling required (see 4.1).
- c. Inspection required (see 4.2).
- d. Whether packing for domestic or overseas shipment is required (see 5.2).

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6.2 This specification covers the following item appearing in the Armed Services Catalog of Medical Materiel:

4-081-000 Beads, Glass, 1 Lb.

6.3 This specification does not include all types, classes, grades, sizes, etc., of the commodity indicated by the title of the specification, or which are commercially available, but is intended to cover the types, etc., which are normally procured to meet Military requirements.

Notice.—When Government drawings, specifications, or other data are used for any purpose other

than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Custodian:

Army—Medical Service

Other interest:

Army—CT,

