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भारतीय मानक मसौदा

**चिकित्सा प्रयोगशाला हेतु कांच का सामान – बिजौ
जीवाण्विक बोतल – विशिष्टि**

(IS 6944 पहला पुनरीक्षण)

Draft Indian Standard

**Medical Laboratory Glassware - Bottle, Bijou,
Bacteriological - Specification**

(First Revision of 6944)

ICS 11.040.55

Medical Laboratory Instruments Sectional
Committee, MHD10

Last date for comments: **17 Oct 2024**

FOREWORD

(Formal Clause, will be added later)

This Indian Standard was originally published in 1973 with the title 'Specification for Bottle, Bijou, Bacteriological'. This revision has been brought out to align it with the recent developments, to update the cross-references to the latest editions and to bring the standard in line with the latest style and format of Indian Standards.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (Second Revision)'

Draft Indian Standard
**Medical Laboratory Glassware - Bottle, Bijou, Bacteriological -
Specification**

1 Scope

Specifies dimensional and other requirements of Bijou bacteriological bottles used in pathological work.

2 REFERNCES

The standards given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards.

<i>Indian Standard</i>	<i>Title</i>
IS 1382 : 1981	Glossary of terms relating to glass and glassware (First Revision)
IS 18219 : 2023/ISO 3585:1998	Borosilicate glass 3.3 - Properties
IS 737 : 2008	Wrought aluminium and aluminium alloy sheet and strip for general engineering purposes - Specification (Fourth Revision)
IS 3692 : 1975	Specification for rubber closures, pharmaceutical (First Revision)
IS 7511 (Part 1) : 1992	Dimensions for neck finishes: Part 1 shallow continuous thread finish (Second Revision)
IS 4426 : 1992	Methods of sampling Laboratory glassware (First Revision)

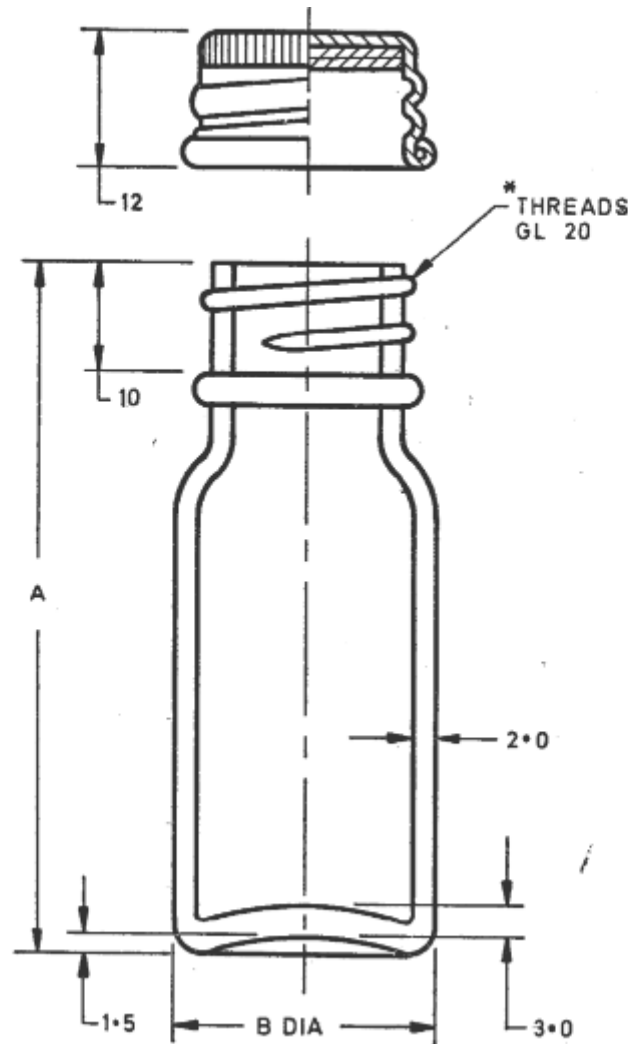
3 Material

3.1 The bottles shall be made from borosilicate glass 3.3 in accordance with IS 18219/ISO 3585.

3.2 The cap shall be made from aluminium sheet conforming to Designation NS3 of IS 737. The minimum thickness of the cap shall be 0.5 mm.

3.3 The wad shall be made from rubber conforming to IS 3692 . The rubber shall be of suitable thickness.

4 Shape, Dimensions and Capac rubber – As shown in Fig. 1.



*See IS 7511 (Part 1) 'Dimensions for neck finishes: Part 1 shallow continuous thread finish (Second Revision)'.

All dimensions in millimetres.

FIG.1 BOTTLE, BIJOU, BACTERIOLOGICAL, TYPICAL

Capacity ml	A	B DIA
6	50	22
10	63	24
15	79	27

5 Workmanship and Finish

5.1 The bottles shall be well-annealed and shall be substantially free from blisters, bubbles, striae, stones, mould marks and other visible defects (for definitions, see IS: 1382).

5.2 It shall be regular in shape and symmetrical.

5.3 There shall be a reasonably uniform distribution of glass all over the walls and the base.

5.4 It shall be smoothly finished.

5.5 The-neck of the bottle shall be of even bore.

5.6 The form, pitch and dimensions of the screw threads on the neck of the bottle shall be as per IS 7511 (Part 1).

5.7 The cap shall be well made and knurled at the top. It shall properly fit on the neck of the bottle.

5.8 The wad shall be uniform in diameter and thickness. It shall fit in the cap for which it is meant so as to give an air-tight closure to the bottle.

6. Tests

6.1 Thermal Shock Test – The bottles shall be boiled in water for 30 min, then transferred to water at about 20°C. They shall not show any chipping or cracking.

6.2 Dry Heat Test – The bottles shall be subjected to a dry heat test in a sterilizing oven at 180 ± 2°C for 30 min. They shall not show deterioration in any way.

6.3 Leakage Test – The bottles shall be tightly screwed with the wad in place and immersed in hot water at 40°C for 5 min. No bubble shall escape through the bottles.

6.4 Autoclave Test – The bottles filled to its nominal capacity with distilled water and tightly capped, shall be autoclaved at a steam pressure of 1.4 kgf/cm² for half an hour. They shall not crack or show any sign of damage.

7. Marking

7.1 The bottles shall be marked permanently and legibly with the following inscriptions the

- a) Name of the manufacturer, his initials or recognized trademark
- b) Nominal capacity in milliliters

7.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standard Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

8. Packing

8.1 Each pipette shall be packed as given in 8.1.1 or as agreed to between the manufacturer and the purchaser.

8.1.1 Each pipette shall, be enclosed in cardboard carton, cushioned with cottonwool at both the ends.

9 SAMPLING

9.1 Sampling and acceptance criteria shall be as agreed to between the purchaser and the supplier preferably as given in IS 4426.