

Specification for

Glass disposable Pasteur pipettes

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Laboratory Apparatus Standards Committee (LBC/-) to Technical Committee LBC/27, upon which the following bodies were represented:

Association of Clinical Biochemists
 British Laboratory Ware Association
 British Lampblown Scientific Glassware Manufacturers' Association Ltd
 Department of Health and Social Security
 Department of Trade and Industry (Laboratory of the Government Chemist)
 Department of Trade and Industry (National Weights and Measures Laboratory)
 Glass Manufacturers' Federation
 Institute of Medical Laboratory Sciences
 Medical Sterile Products Association
 Ministry of Defence
 Society of Chemical Industry

This British Standard, having been prepared under the direction of the Laboratory Apparatus Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 January 1985

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The following BSI references relate to the work on this standard:
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Foreword

This revision of this British Standard has been prepared under the direction of the Laboratory Apparatus Standards Committee and supersedes BS 5732:1979, which is withdrawn.

The main change from the previous edition BS 5732:1979 is the deletion of the 160 mm size pipette, which is no longer marketed in the United Kingdom, and has only a very limited relevance in the export market.

Correspondence with International Standards. This British Standard is technically equivalent to ISO 7712 “*Laboratory glassware — Disposable Pasteur pipettes*” published by the International Organization for Standardization (ISO), differing only in editorial style and in the replacement of subjective requirements for the material of construction and for freedom from defects and stress, by the objective requirements in 5.1 and by the note to that clause, respectively.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 and 2, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for the dimensions, construction, cleanliness, packaging and marking for the two most commonly used sizes of glass disposable Pasteur pipettes, i.e. nominal sizes 145 and 230, representing their nominal overall length, expressed in millimetres.

The pipettes are uncalibrated and are intended for the transfer and replicate dispensing of drops of solutions and of suspensions of biological materials.

NOTE The title of the publication referred to in this standard is given on the inside back cover.

2 Definition

For the purposes of this British Standard the following definition applies.

disposable Pasteur pipettes

pasteur pipettes intended to be used once only, or for one series of replicates and then discarded

3 Dimensions

3.1 Sizes

The sizes of the pipettes shall be as given in Table 1.

NOTE The general form of the pipettes is illustrated in Figure 1.

3.2 Tolerances

The dimensions of the pipettes in any one batch shall not differ by more than the following tolerances:

length:	$\pm 3\%$
wall thickness:	$\pm 10\%$

NOTE 1 Actual manufacturing techniques usually result in tolerances tighter than those specified in this clause.

NOTE 2 The wall thicknesses given in Table 1, if uniform, are considered adequate to provide sufficient strength for the pipettes to withstand normal usage and transport when packed as specified in 8.1 and 8.2.

4 Designation

The size of the pipettes shall be designated by a number representing their nominal overall length, expressed in millimetres, i.e. sizes 145 and 230.

5 Construction

5.1 Material

The pipettes shall be made of colourless soda-lime-silica, neutral or borosilicate glass in accordance with class 4 or better of BS 3473-2.

NOTE The pipettes should be as free as possible from visible defects, and should be reasonably free from internal stresses.

5.2 Top of pipette

The tops of the pipettes shall be finished square with their axes and shall be fire-polished.

5.3 Delivery jet

The external diameter of the delivery jet shall taper sharply from the shoulder to form a long fine jet (see Figure 1) for reaching into test tubes of small internal diameter.

The tip of the jet shall be cut square with the axis.

5.4 Constriction

A constriction shall be provided from the top of the pipette, at the distance specified in Table 1, and shall be adequate to retain a plug of fibrous material such as non-absorbent cotton wool.

NOTE If the pipettes are supplied with plugs, the material and quality of the plugs should be agreed between the purchaser and the vendor.

6 Performance

6.1 Resistance to sterilization

When subjected to any of the following procedures, the pipettes shall not be affected so as to bring them outside the requirements of clauses 3 and 5.

- exposure to dry heat for 60 ± 2 min at 160 ± 1 °C;
- exposure to saturated steam, in an autoclave, for at least 20 min at 121 ± 1 °C;
- exposure to saturated steam, in an autoclave, for at least 3.5 min at 134 ± 1 °C.

NOTE The pipettes should otherwise be suitable for subjection to these procedures.

7 Cleanliness

The pipettes shall be supplied clean and free from visible dirt and stains.

8 Packaging and marking

8.1 Pipettes shall be packed in cartons each containing preferably 250 pipettes, and these cartons may be grouped in an outer carton.

8.2 The packaging shall afford protection against the normal hazards of handling, transport and storage.

8.3 Neither the cartons nor the packing materials shall be made of friable materials so that the pipettes will not be contaminated during transport or handling.

8.4 Each carton of 250 pipettes (see 8.1) and any outer carton shall be clearly marked with the following information:

- manufacturer's name and/or registered trade mark;
- product description, e.g. disposable Pasteur pipettes, size 145;
- number of pipettes in the package;
- batch number or date of manufacture;
- number and date of this British Standard, i.e. BS 5732:1985¹⁾.

Table 1 — Nominal dimensions of glass disposable Pasteur pipettes

Size designation	Overall length <i>A</i>	Body length <i>B</i>	Body external diameter	Body wall thickness	Distance of constriction from top <i>C</i>	Jet tip diameter	
						external	internal
145	mm 145 to 150	mm 85 to 100	mm 6.5 to 8	mm 0.5 to 0.6	mm 20 to 30	mm	mm
230	mm 225 to 230					1.2 to 1.8	0.7 to 1.5

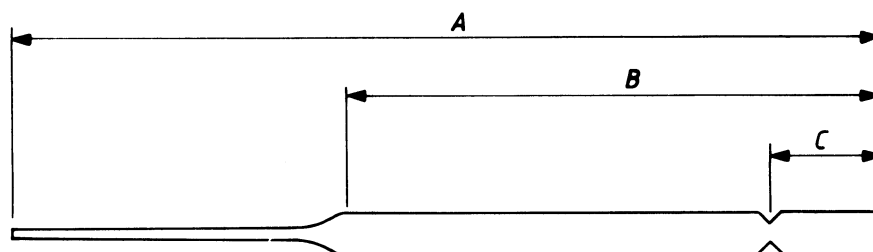


Figure 1 — General form of glass disposable Pasteur pipettes

¹⁾ Marking BS 5732:1985 on or in relation to a product is a claim by the manufacturer that the product has been manufactured to the requirements of the standard. The accuracy of such a claim is therefore solely the manufacturer's responsibility. Enquiries as to the availability of third party certification to support such claims should be addressed to the Director, Quality Assurance Division, BSI, Maylands Avenue, Hemel Hempstead, Herts HP2 4SQ for certification marks administered by BSI or to the appropriate authority for other certification marks.

Publication referred to

BS 3473, *Chemical resistance of glass used in the production of laboratory glassware.*

BS 3473-2, *Method for determination of hydrolytic resistance of glass grains at 98 °C.*

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