

Specification for **Babies' dummies**

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- Association for Consumer Research (ACRE)
- British Paediatric Association
- British Retailers' Association
- British Rubber Manufacturers' Association
- Child Accident Prevention Trust
- Consumer Policy Committee of BSI
- Department of Health and Social Security
- Department of Trade and Industry (Consumer Safety Unit, CA Division)
- Department of Trade and Industry (Laboratory of the Government Chemist)
- Health Visitors' Association
- Institute of Trading Standards Administration
- Malaysian Rubber Producers' Research Association
- Royal College of Midwives
- Royal College of Nursing and National Council for Nurses of the United Kingdom
- Royal Society for the Prevention of Accidents
- Society of Community Medicine

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Materials	1
4 Requirements for individual features	1
5 Performance of the complete dummy	3
6 Packaging	4
7 Marking	4
Appendix A Method of test for the determination of extractable antimony, arsenic, barium, cadmium, chromium, lead and zinc	5
Appendix B Methods of test for performance of the complete dummy	6
Figure 1 — Designation of features	2
Figure 2 — Teat penetration gauge and example of dummy	3
Figure 3 — Ring dimension nomenclature	4
Figure 4 — Compression test	8
Figure 5 — Jaws for bite test	9
Figure 6 — Shape and dimensions of the indenter for the puncture test	10
Figure 7 — Template for flange test	11
Figure 8 — Flange test	12
Publications referred to	Inside back cover

Foreword

This revision of BS 5239 has been prepared under the direction of the Furniture and Household Equipment Standards Committee. It supersedes BS 5239:1986 and BS 5239:1975 both of which are withdrawn. This revision includes new requirements for maximum permissible levels of volatile nitrosamines, for ventilation holes in the flange, and new requirements and test methods for the puncture and tear resistance of teats. Minimum flange dimensions are no longer specified. Instead dummies are required not to pull through an aperture in a template; the template is similar to that used previously in a flexibility test but with the central circular part of the aperture increased in size. Tensile test requirements have also been made more stringent.

NOTE BS 5239:1988 did not come into effect until 28 February 1989, when the Babies' Dummies' (Safety) Regulations 1978 were revoked. Previously the 1975 edition still applied.

NOTE Upon publication of BS 5239:1988, BSI Sales Department will respond to purchase orders for BS 5239 by supplying copies of the 1988 edition. Copies of the 1975 edition may be obtained by quoting the number "BS 5239:1975".

A reduction in the maximum permissible levels of certain soluble metals or their compounds, in order to align them with those proposed in the European Committee for Standardization (CEN) draft standard for toys, will be considered once that CEN standard is published. The presence of undesirable plasticizers in plastics has also been considered but at present there is insufficient information available on the toxicity of plasticizers or test methods for their determination. When more information is available on this subject it too will be reconsidered.

In 1988 a choking incident involving a "sleep time" dummy, i.e. a dummy without a ring, occurred in New Zealand. Certain dummies appear to be designed with knobs or protrusions that are difficult to grasp in an emergency situation. A method of test to determine the gripability of wet dummies when access is restricted, as in the case of removal from an infant's mouth, is therefore required. Until a reliable test method has been developed and appropriate performance criteria established it has been decided that this voluntary standard should specify the incorporation of a ring behind the flange of dummies. When a satisfactory test method has been developed a further amendment to the standard, regarding the gripability of dummies will be considered.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 12, 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 materials, construction, performance, packaging and marking for babies' dummies and includes methods of test for performance requirements and recommendations for the use and care of dummies.

NOTE The titles of the publications referred to in this standard are listed on inside back cover.

2 Definition

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

baby's dummy

a substitute nipple for a baby to suck or bite on that is not designed to facilitate a baby obtaining fluid

3 Materials

3.1 Dummies shall be made entirely of elastomers or plastics, or a combination of these, except where the teat is filled with gelatine jelly (see 4.2) and except where the flange contains solid particles to produce a rattle effect in that these particles shall be smooth rounded glass beads and shall be radio opaque to medical X-rays.

NOTE Dummies and their component parts should be manufactured in such a way that the use of the dummy will not be injurious to health or cause mucosal irritation by reason of any leachable constituents, for example, plasticizers (see foreword), of the dummy or of any substance remaining on the surface of the finished product.

3.2 Dummies or their component parts shall not contain proportions (by mass) of soluble antimony, arsenic, barium, cadmium, chromium, lead or zinc or any of their soluble compounds in excess of the following limits when tested in accordance with Appendix A.

Antimony	250 mg/kg
Arsenic	100 mg/kg
Barium	500 mg/kg
Cadmium	100 mg/kg
Chromium	100 mg/kg
Lead	250 mg/kg
Zinc	500 mg/kg

3.3 All elastomer dummies or elastomeric component parts of dummies, including any filling in the teat (see 4.2), shall not contain in excess of 30 ppb total volatile nitrosamine content, neither shall they contain in excess of 15 ppb of any one volatile nitrosamine, when determined in accordance with BS 7115-1¹⁾; teat filling materials shall be separated from the teats and analysed separately.

NOTE The maximum permissible levels of nitrosamines have been set at somewhat higher levels than was thought to be necessary in order to take into account the variability of test results between laboratories.

4 Requirements for individual features

NOTE Dummies may be made as a one-piece construction or as an assembly of separate component parts.

4.1 Designation of individual features

For the purposes of this British Standard, the features of a dummy shall be designated as shown in Figure 1.

4.2 Teat

The teat shall:

- a) be hollow; or
- b) be solid; or
- c) contain a solid elastomer filling; or
- d) be filled with gelatine jelly only.

If c) or d) apply, the filling shall not be capable of being removed whilst in use.

If the teat is filled with gelatine jelly, this shall incorporate a preservative used for food.

NOTE Attention is drawn to the Preservatives in Food Regulations 1979 (SI 1979 No. 752), concerning preservatives authorized for use in gelatine and gelatine products for human consumption as amended (see SI 1980 No. 931 and SI 1982 No. 15), and to all subsequent amendments.

When assembled, or after completion of moulding of a one-piece article, the effective penetration of the teat shall be checked using the teat penetration gauge shown in Figure 2(a). The teat of the dummy shall be inserted into the centre of the gauge with its major axis vertical and the dummy shall be rotated about its major axis to obtain the greatest depth of penetration. In this position the teat shall not touch the base of the gauge.

NOTE An example of a design of dummy having an effective length greater than the length of the teat is shown in Figure 2(b). The outside surface of the teat shall be smooth and free from cracks, pits and holes.

There shall be no hole in the teat in front of the flange such as would permit the ingress or egress of fluids.

¹⁾ In preparation.

4.3 Flange

Flange dimensions shall be such that when tested in accordance with **B.7**, with the flange oriented in the least favourable position in relation to the aperture in the template, the dummy shall not pull through the template.

The surface shall be smooth. Edges shall be radiused and free from any sharpness or projecting points liable to cause injury.

The flange shall have two ventilation holes that permit the unhindered passage of a test rod with a diameter of at least 5 mm. These two ventilation holes shall be symmetrically located on the flange, their centres shall be at least 15 mm apart and their edges shall be at least 5 mm from the edge of the flange.

NOTE 1 There may be other holes in the flange but there are no requirements for location or size of any other additional holes in the flange.

NOTE 2 The purpose of ventilation holes is to provide an air passage through which a baby could breathe, should the dummy be accidentally swallowed, and thereby reduce the risk of the dummy being sucked into the pharynx through the generation of a negative pressure.

4.4 Plug

Where the design requires a plug to be fitted, it shall be of such design and material that it does not cut the teat or crack the flange, either during assembly or afterwards in use.

After assembly the plug shall not protrude more than 17 mm beyond the rear of the flange.

NOTE A vent hole may be incorporated in the plug.

4.5 Ring

4.5.1 General. A dummy shall incorporate a ring behind the flange to permit ease of extraction from the mouth.

4.5.2 Ring. The surface shall be smooth and free from any sharp edges.

The width of the ring (see Figure 3) shall be a minimum of 25 mm and, where flexible materials are used, a maximum of 45 mm. The length of the ring (see Figure 3) shall not be greater than the width.

NOTE For a non-circular ring, the design should ensure that the ring remains in the correct orientation and does not rotate through its point of attachment such that the length can exceed the width (see Figure 3).

The shape of the ring shall permit the unhindered passage of a test rod with a diameter of at least 14 mm (see Figure 3), positioned on and perpendicular to the major axis of the dummy, and with the cross section of the rod in the same plane as the plane of the ring.

Where the ring is a separate component, it shall, after assembly to the dummy, be free to move through an arc of not less than 80° on each side of the major axis of the dummy. Rigid rings shall not lock over the flange. Where moulded as an integral part of the flange, the ring shall be flexible at its juncture with the flange such that it can be flexed easily through an arc of not less than 80° on each side of the major axis of the dummy.

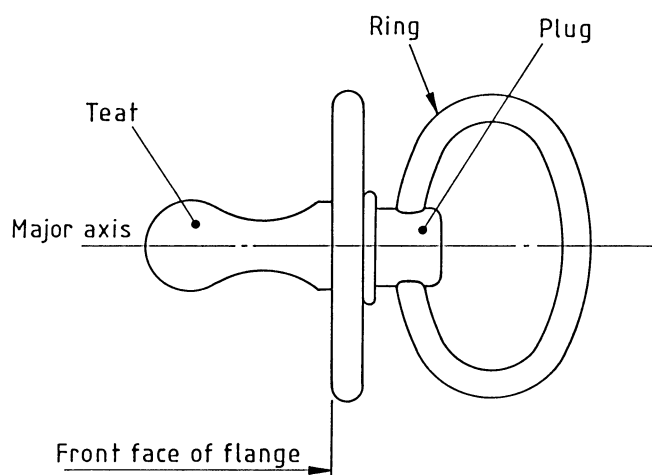


Figure 1 — Designation of features