

Insulated domestic food containers —

Part 1: Specification for vacuum ware and insulated flasks, jars and jugs

UDC 641.546:620.16

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Furniture and Household Equipment Standards Committee (FHM/-) to Technical Committee FHM/23 upon which the following bodies were represented:

- British Leathergoods Manufacturers' Association
- British Retailers' Association
- Consumer Standards Advisory Committee of BSI
- Department of Trade and Industry (Consumer Safety Unit, CS Division)
- Department of Trade and Industry (Laboratory of the Government Chemist)
- Glass Manufacturers' Federation
- Health Visitors' Association
- Mail Order Traders' Association of Great Britain

This British Standard, having been prepared under the direction of the Furniture and Household Equipment Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 January 1986

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The following BSI references relate to the work on this standard:
Committee reference FHM/23
Draft for comment 84/39679 DC

ISBN 0 580 14876 9

Amendments issued since publication

Amd. No.	Date of issue	Comments
7199	June 1992	Indicated by a sideline in the margin

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Foreword

This Part of BS 6672 has been prepared under the direction of the Furniture and Household Equipment Standards Committee and is a revision and extension of BS 4557:1970 “*Vacuum flasks*” which is withdrawn.

This Part of BS 6672 gives requirements and describes tests by which domestic vacuum flasks and related insulated food and drink containers can be assessed for performance and efficiency.

Additional requirements are included for safety, strength and corrosion resistance and with the extension of the provisions of the standard to cover the area of non-vacuum insulation and jugs, jars, etc., a grading system for thermal performance has been introduced. This is based on the time taken for the temperature of a beverage to fall from just off the boil to 75 °C, at which temperature it is considered that an acceptably hot drink can still be prepared even after the addition of cold milk.

In the preparation of BS 4557:1970 tests were carried out which showed the equivalence of performance of thermal insulation with respect to heat gain and heat loss and, for the products considered in this Part of BS 6672, no tests for the former are considered necessary in judging performance.

Attention is drawn to the provisions of Statutory Instrument SI 1978 No. 1927 “Materials and Articles in Contact with Food Regulations” and subsequent amendments thereto.

Certification. Attention is drawn to the certification facilities described on the inside back cover.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, 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 Part of BS 6672 specifies requirements for vacuum ware and other insulated flasks, jars, jugs, etc., for domestic usage with food or drink not exceeding 2 L nominal capacity.

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

2 Definitions

For the purposes of this Part of BS 6672 the following definitions apply.

NOTE The terms insulated container and nominal capacity are defined in a different manner for large containers where the inner surface is not always in direct contact with unwrapped food and where lid space may form a part of the usable volume. These containers are covered by BS 6672-2.

2.1

insulated container

a flask, jug, jar, bottle, etc., consisting of an inner food container and an outer protective case with an insulant interposed between them in order to reduce to a minimum the transfer of heat to or from the contents of the inner food container

NOTE The term food also includes drink.

2.2

vacuum flask

an insulated container in which the insulant is a vacuum

2.3

closure

a stopper, screw-cap, etc., capable of closing off the inner food container by direct contact with the mouth of the inner container or by pressing against an intermediate inner seal

NOTE The closure may take the form of a closure for the inner food container and an entirely separate one for the outer case. This may assist in the closing of the inner food container or be in the form of a drinking cup.

2.4

pump-pot

an insulated container whose contents are released by applying air pressure through a pump system such that the liquid contents are forced up from the bottom of the container and out of the container via a nozzle

2.5

nominal capacity

the volume of water at 15 ± 1 °C required to fill the insulated container, when standing on a level surface, to a level 10 mm below that of the inserted closure

NOTE Features of a typical insulated flask are shown in Figure 1.

3 Materials and construction

NOTE It is a requirement of the Materials and Articles in Contact with Food Regulations (SI 1978 No. 1927) that materials used in the construction of an insulated container, its closure(s) and cups be of a type and purity that under normal conditions of use present no toxic hazards nor in any way affect the organoleptic qualities of food kept in it.

3.1 Corrosion of metal components

When tested in accordance with Appendix K of BS 1224:1970 for a duration of 8 h, neither the appearance nor the function of metal components shall be adversely affected.

3.2 Toxic metals in plastics components and surface coatings

Plastics components, and any surface coatings of which more than 10 mg can be obtained by a physical method of removal, shall not contain soluble antimony, arsenic, barium, cadmium, chromium, lead or mercury or any soluble compound of any of those elements, such that the proportion of the element when determined in accordance with Appendix A exceeds the following amounts:

antimony	250 mg/kg
arsenic	100 mg/kg
barium	500 mg/kg
cadmium	100 mg/kg
chromium	100 mg/kg
lead	250 mg/kg
mercury	100 mg/kg

NOTE Surface coatings include ink, paint, varnish, lacquer, transfers, etc.

3.3 Adhesion of surface coatings

It shall not be possible to remove or damage any part of a surface coating by the swift removal of an applied self-adhesive tape. The tape used shall have a specific adhesion to stainless steel of not less than 400 g/cm when removed at 180° and at approximately 1 m/s.

3.4 Inner seal material

Material used for an inner seal shall be resistant to 120 °C for 48 h without detriment to the appearance or to the performance in accordance with 4.5.

3.5 Finish

An insulated container and its closure(s) shall be free from sharp points or edges on all exposed surfaces and shall be finished smooth and free from flash, burrs etc., at all points of potential contact with food in normal use.