

Specification for

Manufacture of glass bottles for carbonated soft drinks including carbonated water

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Packaging and Freight Containers Standards Policy Committee (PKM/-) to Technical Committee PKM/563, upon which the following bodies were represented:

Association for Consumer Research (ACRE)
Association of the British Pharmaceutical Industry
Bee Farmers' Association of Great Britain
Brewers Society
British Glass Manufacturers' Confederation
British Pharmacopoeia Commission
British Plastics Federation
British Soft Drinks Association Ltd.
Campden Food and Drink Research Association
Chemical Industries Association
Child Accident Prevention Trust
Consumer Policy Committee of BSI
Dairy Trade Federation
Department of Health
Department of Trade and Industry (Consumer Safety Unit, CA Division)
Food and Drink Federation
Honey Importers and Packers' Association
Institute of Trading Standards Administration
Metal Packaging Manufacturers' Association
National Association of Cider Makers
Retail Consortium
Royal Society for the Prevention of Accidents
Scotch Whisky Association
Scottish Association of Soft Drinks Manufacturers
Welsh Beekeepers' Association
Wine and Spirit Association of Great Britain

This British Standard, having been prepared under the direction of the Packaging and Freight Containers Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 31 January 1991

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Foreword

This British Standard has been prepared under the direction of the Packaging and Freight Containers Standards Policy Committee. It specifies requirements for the manufacture of glass bottles for carbonated soft drinks including carbonated water. Glass bottles of nominal capacity greater than 1.15 L are not recommended for packaging carbonated soft drinks or carbonated water. Glass bottles are not recommended for packaging soft drinks where carbonation pressures exceed 4.7 bar¹⁾, except in the case of refillable bottles with a nominal capacity no greater than 180 mL, where carbonation pressure up to 5.3 bar can be accommodated. In this standard design head space has been related to bottle capacity. Glass bottles with non-circular cross sections are not recommended for packaging carbonated soft drinks including carbonated water.

By specifying the requirements for control of the bottle manufacturing process which establish compliance with this standard, this British Standard is intended to provide manufacturers, distributors, users and other interested groups with a basis for common understanding of the bottle manufacturing process control.

There is no British Standard method of test for the determination of relative annealing strain in glass containers. However an appropriate ASTM test method exists. Use of the ASTM method has therefore been specified but the test method is not reproduced in the appendices.

This British Standard calls for the use of test procedures that may be injurious to health if adequate precautions are not taken by the person doing the test. In particular, attention is drawn to hazards associated with the tests for internal pressure resistance and thermal shock resistance. Compliance with this standard in no way absolves the user from statutory obligations relating to health and safety at any stage of manufacture or use.

This British Standard is the outcome of initial work on criteria concerning safety aspects of glass containers for carbonated soft drinks. This work is continuing and it is anticipated that further British Standards concerning safety aspects of carbonated beverage containers will be developed.

Parts 1 and 2 of the British Glass Manufacturers Confederation publication "Strength and performance standards for the manufacturer and use of carbonated beverage bottles" contains information on bottle design and manufacturing controls. Additional background information can be found in "Packaging in glass" by B. Moody, revised edition 1977, published by Hutchinson Benham, London.

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.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 6, 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⁾ 1 bar = 10⁵ N/m² = 100 kPa.