

Specification for

Blow moulded polyolefin containers —

Part 2: Containers over 5 litres and up
to 60 litres capacity

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The Packaging Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- Association of Drum Manufacturers
- British Paper and Board Makers's Association*
- British Paper Bag Federation
- British Plastics Federation*
- British Tin Box Manufacturers' Federation
- Chemical Industries Association*
- Collapsible Tube Manufacturers' Association
- Confederation of British Industry
- Crown Agents for Oversea Government and Administrations
- Department of the Environment
- Department of Trade and Industry
- Envelope Makers' and Manufacturing Stationers' Association
- Fibreboard Packing Case Manufacturers' Association
- Food Manufacturers' Federation (Incorporated)*
- Glass Manufacturers' Federation
- Institute of Packing
- Institute of Trading Standards Administration
- Institution of Production Engineers
- Ministry of Defence, Procurement Executive
- Oil Companies Materials Association
- Packaging Films Manufacturers' Association
- Paintmakers' Association of Great Britain Ltd.
- PIRA (Research Association for the Paper and Board Printing and Packing Industries)*
- Soap and Detergent Industry Association
- Society of Motor Manufacturers and Traders Ltd.*
- Technical Section of the British Paper and Board Makers' Association
- Timber Pakcaging and Pallet Confederation

The scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- Association of the British Pharmaceutical Industry
- British Closure Manufacturers' Association
- British Railways Board
- British Rubber Manufacturers' Association
- British Stationery and Office Equipment Association
- Ministry of Defence/Department of Trade and Industry (IPTS-C)
- National Association of Soft Drinks Manufacturers
- National Sulphuric Acid Association
- Society of British Aerospace Companies Ltd.
- Toilet Preparations Federation Ltd.

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Foreword

This Part of this British Standard has been prepared under the authority of the Packaging Standards Committee at the request of the British Plastics Federation. It supersedes BS 3897, "*Plastics (polythene) containers (10 gallon capacity)*".

Part 2 of this standard is the second of a series dealing with blow moulded polyolefin containers for general purpose use. Part 1 covers containers up to and including 5 litres capacity.

No attempt has been made to specify shape or styling for the containers as this is considered to be the prerogative of the package designer. Details of closures are not specified, but consideration will be given to including such information in a subsequent revision.

Users of plastics containers are advised to consult the Weights and Measures Act, 1963, regarding stated quantities of contents of containers.

For polyolefin containers to hold products classified as dangerous goods it may be necessary to comply with certain mandatory regulations, performance requirements and special carrier requirements.

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

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 10, 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 this British Standard specifies tolerances on dimensions and performance requirements for free standing blow moulded containers, made from polyolefins, with capacities over 5 litres up to and including 60 litres, and having an internal neck diameter not exceeding 75 mm. Methods of measurement and methods of test for certain important properties of the containers are also specified.

A recommended range of nett capacities for stock containers for liquid products is included.

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

2 Definitions

For the purposes of this Part of this British Standard the following definitions apply.

2.1

polyolefin

a thermoplastic material produced by the polymerization or copolymerization of olefins. Examples of polyolefins are high density and low density polyethylene or polypropylene, and their copolymers

2.2

blow moulded containers

a container formed from a parison of heat-softened thermoplastics material by the application of pressure which forces it against the internal walls of a blow mould

2.3

mould part line

a line on the container corresponding to a parting joint of the blow mould

2.4

brimful capacity

the volume of liquid held by the container when filled to the point of overflowing while standing on a level surface with all closures removed

NOTE See Figure 1.

2.5

nett capacity

the volume of liquid the container is intended to hold

NOTE See Figure 1

2.6

gross capacity

the total enclosed volume of the container including any space which may not be capable of being filled

2.7

neck face

the uppermost surface of the container neck

NOTE See Figure 1.

2.8

container height to neck face

the height of the highest point of the neck face of the finished empty container

NOTE See Figure 1.

2.9

container overall height

the height of the finished empty container at its highest point, excluding the closure

NOTE See Figure 1.

2.10

container overall plan dimensions

the principal plan dimensions of the container, e.g. the external diameter of a cylindrical container

2.11

neck height

the perpendicular distance from the highest point of the plane including the neck face to the nearest point of the finished container shoulder along a line passing through the following

- In the case of screw threaded necks: the outermost edge of the thread. A feature below the thread of greater diameter than the thread is considered as part of the container's shoulder.
- In the case of plain cylindrical and internally threaded necks: the outermost diameter point excluding flash.
- In the case of necks having a bead and thread, or beads only: the outermost point of the bead.

NOTE 1 See Figure 1.

NOTE 2 A bead is separated from the container shoulder by a region of diameter smaller than that of the bead.

2.12

internal neck diameter

the minimum, internal diameter of the neck whether it be parallel, tapered or internally threaded

2.13

external neck diameter

the external diameter of the neck, excluding thread and/or prominences, measured as the mean of two perpendicular diameters avoiding the part line

2.14

thread diameter

the diameter of the neck thread measured as the mean of two perpendicular diameters avoiding the part line