

Specification for

Portable appliances operating at vapour pressure from liquefied petroleum gas containers

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Cooperating organizations

The Gas Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following:

- British Combustion Equipment Manufacturers Association
- British Gas Corporation
- Chartered Institution of Building Services
- Department of Energy (Gas Standards)
- Department of the Environment (PSA)
- Department of the Environment (Housing and Construction)
- Heating and Ventilating Contractors' Association
- Institution of Gas Engineers*
- Liquefied Petroleum Gas Industry Technical Association (UK)*
- National Association of Plumbing, Heating and Mechanical Services Contractors
- National Gas Consumers Council
- Society of British Gas Industries
- Water-tube Boilermakers' Association

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

- Chief and Assistant Chief Fire Officers Association
- Department of Trade
- Health and Safety Executive
- Institution of British Engineers
- Institution of Fire Engineers

This British Standard, having been prepared under the direction of the Gas Standards Committee, was published under the authority of the Executive Board and comes into effect on 31 July 1981

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Contents

	Page
Cooperating organizations	Inside front cover
Foreword	ii
Section 1. General	
1 Scope	1
2 References	1
3 Instructions	1
4 Marking	1
Section 2. Construction	
5 Workmanship, fittings and materials	2
6 Maintenance	2
7 Stability	2
8 Interchangeability	2
9 Fasteners	2
10 Inlet connection	2
11 Surface finishes	3
12 Valves	4
13 Non-metallic materials in contact with gas	4
14 Injector jets	4
15 Brass parts	4
16 Guards	4
17 Primary air adjusters	4
18 Flexible hose	4
19 Gas containers	4
20 Leakage	5
Section 3. Operation	
21 Test gases	5
22 Test gas pressures	5
23 Ignition	5
24 Flame travel	5
25 Flame stability	5
26 Combustion	5
27 Surface temperatures	5
28 Picnic stove boiling time	6
29 Maximum heat output for portable space heaters	6
Appendix A Conversion factors from metric to imperial units	7
Figure 1 — Paint scratch test apparatus	3
Publications referred to	8

Foreword

BS 3879 has been prepared under the direction of the Gas Standards Committee and is intended to establish minimum standards of construction, performance and safety requirements for portable liquefied petroleum gas appliances operating at vapour pressure from LPG containers.

This revision of BS 3879 is an outcome of the recommendations of a joint working party of committees responsible for pressurized containers and high pressure gas appliances that was established to consider the design of containers, of appliances and of means of ensuring their compatibility and safe use.

This standard supersedes BS 3879:1969, which is therefore withdrawn.

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 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.

Section 1. General

1 Scope

This standard specifies the construction, operation, safety requirements and tests for portable liquefied petroleum gas appliances, such as domestic, commercial and industrial cooking appliances, lights, space heaters and blow torches, intended for operating at the vapour pressure of the gas, and used in conjunction with non-refillable gas containers complying with the requirements of BS 5329 or with refillable gas containers including those complying with the requirements of BS 5045-2 provided that they contain commercial butane or commercial propane complying with BS 4250, or a mixture thereof.

This standard excludes liquid feed burners and equipment having integral gas containers refillable by the user and does not apply to portable liquefied petroleum gas appliances when used in caravans and boats.

NOTE The installation of butane and propane gas burning appliances in caravans and boats is covered in BS 5482-2 and BS 5482-3 respectively.

2 References

The titles of the publications referred to in this standard are listed on page 8.

3 Instructions

3.1 Precise instructions for assembly, maintenance and safe use shall be provided with each appliance. The instructions for safe use shall include:

- a) a statement that containers must be changed in a safe place, preferably outside or in a well ventilated position, away from any source of ignition, e.g. naked flames, pilot lights, electric fires, and away from other people;
- b) instructions for ensuring that sealing washers are in place and are in good condition before connecting the appliances to the gas container;
- c) a diagram indicating the location of the sealing washers between the container and the appliance;
- d) instructions for ensuring adequate ventilation when the appliance is in use;
- e) a warning to ensure that the appliance is operated at a safe distance from flammable materials;

f) a statement that when using a container connected to an appliance by a hose the gas supply must be turned off at source after use to avoid the possibility of gas liquefaction in the hose;

g) a statement that where containers are of the piercable type they must not be removed until empty;

h) a statement that the appliance, except for blow lamps, must be operated on a level surface;

i) a warning to the effect that appliances incorporating a gas container and designed to be hand-held when in use, e.g. blow lamps, may be subject to flaring, particularly during the warm-up period, or if violently moved.

The instructions shall be such as to leave no doubt in the user's mind of their correct interpretation, particularly with regard to the fitting or changing of gas containers and the replacement of perishable parts when necessary.

3.2 The instructions accompanying each appliance shall include a statement that the appliance has been designed to comply with the requirements of this British Standard, i.e. BS 3879¹⁾, and shall indicate the type of gas and container for which the appliance was designed. The instructions shall also draw the user's attention to the hazards of attempting to connect a container for which the appliance was not designed.

4 Marking

4.1 Each appliance shall be visibly and permanently marked with:

- a) the type of gas;
- b) the trade mark(s) and type(s) of the container for which the appliance is designed to be used;
- c) the appliance manufacturer's name, trade mark or other identification;
- d) the appliance manufacturer's type number or other means of identifying the precise model.

4.2 In the case of blow lamps and in addition to the requirements of 4.1, a warning notice against the possibility of flaring shall also be marked on the appliance.

¹⁾ Marking BS 3879 on or in relation to a product is a claim by the manufacturer that the product has been manufactured in accordance with the requirements of the standard. The accuracy of such a claim is therefore solely the responsibility of the manufacturer. Enquiries as to the availability of third party certification to support such claims should be addressed to the Director, British Standards Institution, Maylands Avenue, Hemel Hempstead, Herts HP2 4SQ in the case of certification marks administered by BSI or to the appropriate authority for other certification marks.