

Australian Standard[®]

**LIQUEFIED PETROLEUM (LP)
GAS—
PORTABLE AND MOBILE
APPLIANCES**

This Australian Standard was prepared by Committee CS/52, Portable LP Gas Appliances. It was approved on behalf of the Council of the Standards Association of Australia on 12 April 1988 and published on 17 June 1988.

The following interests are represented on Committee CS/52:

Australian Consumers Association
Australian Gas Association
Australian Liquefied Petroleum Gas Association
Australian Retailers Association
Confederation of Australian Industry
Department of Consumer Affairs, N.S.W.
Department of Home Affairs and Environment
Department of Industrial Relations, N.S.W.
Department of Mines, Qld
Gas Appliance Manufacturers Association of Australia
Metal Trades Industry Association of Australia

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PREFACE

This standard was prepared by the Association's Committee on Portable LP Gas Appliances in response to a request by the Australian Gas Association.

The standard embodies most of the requirements set out in Australian Gas Industry Code AG 113—1978, Approval Requirements for Leisure Type Appliances, issued by the Australian Gas Association and the Australian Liquefied Petroleum Gas Association, and the assistance received from these organizations is gratefully acknowledged.

There are two main areas where this standard diverges from AG 113: details of the AGA Appliance Approval Scheme are not included since these are covered in the AGA's own documents, and the subjects of surface temperatures and the guarding of space heaters have been dealt with by reference to AS 2285, Guarding of Domestic Heating Appliances for Protection Against Fire and Burn Injury, in order that uniform requirements be applicable to the guarding of all types of heaters. The requirements of AS 2285 are, in this respect, substantially similar (though not identical) to those of AG 113.

Although the original intention of this standard was to cover portable and mobile LP gas appliances which found their markets mainly in the leisure type industries, the committee, in the course of its work on the standard, considered that there may be some appliances which should be covered by this standard but fail to be strictly encompassed by the definition of the term 'leisure'. Accordingly, the term 'leisure' has not been embodied in the scope of the standard. Nevertheless, the scope of the standard is confined to portable and mobile appliances which are intended to operate from a locally associated LP gas cylinder.

This edition is substantially the same as the previous edition but it introduces a new general requirement for the security of adjusting devices.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
LIQUEFIED PETROLEUM (LP) GAS—PORTABLE AND MOBILE APPLIANCES

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for portable and mobile LP gas appliances, connected directly or by flexible hose to a single LP gas supply cylinder, such appliances being used for cooking, refrigeration, lighting or heating and being operative when supplied with liquefied petroleum gas at either cylinder or regulated pressures.

NOTES:

1. This standard does not cover appliances which are intended for connection to a fixed piping system as in a building, caravan or boat.
2. Requirements for gas cylinders are specified in AS 2030.

1.2 APPLICATION. Portable and mobile LP gas appliances shall comply with the requirements of Section 2, and with the requirements of the following Sections according to the nature of the appliance:

- (a) Cookers Section 3.
- (b) Portable Space Heaters Section 4.
- (c) Barbecues Section 5.
- (d) Gas Lights Section 6.
- (e) Refrigerators and Freezers Section 7.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

- AS 1596 SAA LP Gas Code
 AS 1869 Liquefied Petroleum Gases (LPG) - Hose and Hose Assemblies
 AS 1881 Zinc Alloy Ingots (for Pressure Diecasting) and Zinc Alloy Pressure Diecastings
 AS 2030 SAA Gas Cylinders Code
 AS 2136 Method for Detecting the Susceptibility of Copper and its Alloys to Stress Corrosion Cracking Using the Mercurous Nitrate Test
 AS 2285 Guarding of Domestic Heating Appliances for Protection Against Fire and Burn Injury

1.4 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.4.1 Barbecue—an underfired cooking unit with either an open grid or solid cooking top. Food is cooked by a combination of radiant and/or convected heat and may be assisted by flared fat.

1.4.2 Burner head—the component of the burner from which gas or an air/gas mixture is discharged for the purpose of combustion, the flame from which is stabilized.

1.4.3 Burner port—the opening in a burner through which gas or an air/gas mixture issues to be ignited and burned.

1.4.4 Flame abnormality—a flame condition which results in lifting, floating, lighting back, appreciable yellow tipping, carbon deposition or objectionable odour.

1.4.5 Flame safeguard—a safety device which automatically cuts off the gas supply if the activating flame is extinguished.

1.4.6 Gas consumption—a measure of the energy introduced into an appliance under specified conditions, expressed in megajoules per hour or grams per hour.

1.4.7 Gas pressure regulator—a device which automatically regulates, to a predetermined value, the outlet pressure or outlet volume of gas passing therethrough.

1.4.8 Gas manifold—a common supply pipe or chamber into which tapings are made to supply gas to a plurality of burners.

1.4.9 Griller—an appliance for cooking food by radiant heat.

1.4.10 Injector—a device which causes air to mix with a stream of gas. For an aerated burner, it incorporates an orifice discharging gas into the burner mixing tube.

1.4.11 Mixing tube—that part of an aerated burner in which the air and gas are mixed.

1.4.12 Mobile appliance—an appliance with one or more wheels, designed to be easily moved from place to place by one person.

1.4.13 Nominal gas consumption—the gas consumption as stated by the manufacturer on the appliance data plate, in instructions and in general communications. (See Clause 1.4.6.)

1.4.14 Nominal inlet pressure—the gas pressure at the appliance inlet or test point (if provided), as nominated by the manufacturer to give the nominal gas consumption. (See Clause 1.4.13.)

1.4.15 Orifice—an accurately drilled hole in the injector, which functions as a metering device to control the gas consumption of a burner. It is also a directional guide for the gas injected into the burner throat.

1.4.16 Oven—that portion of a gas cooker or separate unit, consisting of an enclosed, insulated cabinet in which food is cooked.

1.4.17 Overload gas consumption—the gas consumption when overload inlet pressure, appropriate to the appliance and to the gas in use, is applied to the inlet of the appliance. (See Clause 1.4.6.)