

Non-refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances — Construction, inspection, testing and marking

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British Standard

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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 Standards Board and comes into effect on 15 November 1992

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First published as BS 5329
February 1976
Second edition October 1988
First published as BS EN 417
November 1992

The following BSI references relate to the work on this standard:
Committee reference PKM/21
Draft for comment 90/48640 DC

ISBN 0 580 20921 0

Amendments issued since publication

Amd. No.	Date	Comments

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National foreword

This British Standard has been prepared under the direction of the Packaging and Freight Containers Standards Policy Committee and is the English language version of EN 417:1992 *Non-refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances — Construction, inspection, testing and marking*, published by the European Committee for Standardization (CEN). BS EN 417 supersedes BS 5329:1988 which is withdrawn.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 16, 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.

UDC 621.642.1.02.036-034:662.767:620.1:62-777

Descriptors: Pressure vessels, metal products, disposable equipment, gas supply, liquefied petroleum gases, portable equipment, definitions, design, specifications tests, inspection, marking

English version

Non-refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances — Construction, inspection, testing and marking

Cartouches métalliques pour gaz de pétrole liquéfiés, non rechargeables, avec ou sans valve, destinées à alimenter des appareils portatifs — Construction, contrôle et marquage

Metallische Einwegkartuschen für Flüssiggas mit oder ohne Entnahmeventil zum Betrieb von tragbaren Geräten — Herstellung, Prüfung und Kennzeichnung

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 157 “*Non-refillable metallic cartridges*”, of which the secretariat is held by AFNOR.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 1993, and conflicting national standards shall be withdrawn at the latest by March 1993.

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Introduction

This standard covers “non-refillable metallic cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances”.

It has become necessary to establish a specific standard for these cartridges, as the European Directive 75/324/EEC concerning aerosol generators does not cover the essential functions of cartridges for liquefied petroleum gas, i.e. containing a gas suitable for the operation of the appliance and supplying the appliance in a gas tight fashion, taking account of its geometry and the heating that might occur.

The safety of the user therefore depends on the use of cartridges complying with this standard, which in consequence, will be marked, inspected and tested in accordance with the requirements of this standard.

This standard also defines the tests to be used as a basis for type examination and pending a European Directive for these cartridges, describes a procedure which can serve as a guide to the organizations responsible for issuing type examination certificates.

This standard does not apply to appliances with an integral gas container which is not interchangeable, or to cartridges for filling such containers.

1 Scope

This European Standard specifies material, construction, inspection and marking requirements for non-refillable metallic gas cartridges with or without a valve for use with portable appliances which comply with the requirements of EN 521 “*Portable appliances operating at vapour pressure from liquefied petroleum gas containers*”.¹⁾

This standard applies to cartridges with a total capacity of between 50 ml and 1 000 ml, designed to contain stented liquefied petroleum gas or stabilized mixtures of liquefied petroleum gas with propadiene and/or methyl acetylene, where the pressure developed by the contents of the cartridge at 50 °C does not exceed 12 bar.

However, stenting of these gases is optional for cartridges with a total capacity not exceeding 150 ml.

This standard does not apply to aerosol dispensers — manufactured, filled, tested and marked in accordance with the Directive 75/324/EEC.

2 Definitions

For the purposes of this standard, the following definitions apply.

2.1

gas cartridge

non-refillable container filled once only with gas or a mixture of gases for fuelling portable gas appliances which burn the gas or gases in use

2.2

pierceable gas cartridge

a cartridge without a valve. The gas supply is obtained by piercing the cartridge by means of a specific device which is part of the portable appliance with which the cartridge is to be used

2.3

two piece gas cartridge with valve

a cartridge constructed of two pieces with an aperture at the top end into which a male or female valve is fitted. The gas supply is obtained by the connection of the portable appliance to the valve

2.4

three piece gas cartridge with valve

a cartridge constructed of three pieces with an aperture at the top end into which a male or female valve is fitted. The gas supply is obtained by the connection of a portable appliance to the valve

2.5

total capacity

the internal volume of the empty gas cartridge at 20 °C, expressed in millilitres, before any accessories are fitted, such as valves, etc.

2.6

net capacity

the volume, expressed in millilitres, which is available to receive the contents when the gas cartridge is sealed and fitted with its accessories

2.7

test pressure

pressure that is equal at a temperature of 50 °C to 1,5 times the pressure which would be developed by gas with which the cartridge will be filled, or 10 bar, whichever is the greater

2.8

burst pressure

the minimum pressure which causes leakage from the gas cartridge

¹⁾ In preparation at the time of the publication of this standard. PrEN 521 has been submitted to six months enquiry until 1991-12-27.