Mittekorduva täitmisega, ventiiliga või ilma ventiilita, metallist gaasipadrunid vedelgaasile, kasutamiseks portatiivsetes seadmetes. Konstruktsioon, kontrollimine, katsetamine ja märgistamine

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



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN
417:2003 sisaldab Euroopa standardi EN
417:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 417:2003 consists of the English text of the European standard EN 417:2003.

This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

Käesolev standard määratleb materjali, konstruktsiooni, kontrollimise ja märgistamise nõuded mittekorduva täitmisega, ventiiliga või ilma ventiilita, metallist vedelgaasipadrunite kasutamiseks portatiivsetes seadmetes, mis on vastavuses EN 521 nõuetega. Portatiivsed seadmed töötavad vedelgaasimahutist lähtuva aururõhu toimel

Scope:

ICS 23.020.30

Võtmesõnad: cartridges (explosives), gas supp, liquefied petroleum gas, liquefied petroleum gases, manufacturing, marking, materials, metallic, metals, portable equipment, pressure vessels, production, removal devices, test specimens, testing, transportable, type testing, valves

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 417

May 2003

ICS 23.020.30

Supersedes EN 417:1992

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, essais et marquage

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

This European Standard was approved by CEN on 13 February 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

		page
	ord	
ntrodu	uction	4
I	Scope	5
2	Normative references	5
3	Terms and definitions	5
1	Materials, design and construction	6
1.1	Materials	
1.2	Design and construction - General	7
1.3	Pierceable cartridges	7
1.4	Cartridges with valves	9
5	Requirements for filled gas cartridges	14
6	Type testing	14
6.1	General	14
5.2	Dimensions	14
6.3	Net capacity	14
6.4	Pressure strength	14
6.5	Gas tightness of cartridges	14
6.6	Gas tightness of valves	15
6.7	Drop test	
8.6	Threaded centre boss valve – Mechanical strength torque test	
7	Manufacturing and filling tests and examination	
7.1	General	
7.2	Tests and inspection performed by the cartridge manufacturer	
7.3	Test performed by the valve manufacturer	
7.4	Tests and inspection performed by the filler	
3	Marking	
3.1	General	
3.2	Marking applicable to all cartridges	
3.3	Additional marking for cartridges with valves	
3.4	Additional marking for pierceable cartridges	
3.5	Additional marking for cartridges of diameter or height less than 40 mm	
3.6	Optional marking	23
Annex	A (informative) Cartridges with valves, mounted in a single layer, threaded centre boss valve cup	2/
•		
	B (informative) Type testing procedure	
Annex	C (normative) Pressure strength test on finished cartridges — Test method	28
Bibliog	yraphy	30

Foreword

This document (EN 417:2003) has been prepared by the Task Force CEN/BT/TF 114, "Non-refillable metallic cartridges" the secretariat of which is held by AFNOR.

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 November 2003, and conflicting national standards shall be withdrawn at the latest by November 2003.

In order to avoid a sudden change in the rule of operation of EN 417, the CEN/BT/TF 114 decided that specifications related to single layer valves be moved to an informative annex (annex A) and remain in force during a transitional period of five years after the publication of the revised standard.

Annex C is normative. Annexes A and B are informative.

This document supersedes EN 417:1992.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

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 describes a procedure which can serve as a guide to the organizations responsible for issuing type examination certificates.

The state of the s 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.

This standard is applicable to cartridges with a total capacity of between 50 ml and 1 000 ml, designed to contain stenched 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 13,2 bar.

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

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

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 521, Specifications for dedicated liquefied petroleum gas appliances - Portable vapour pressure liquefied petroleum gas appliances

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1

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

3.2

pierceable gas cartridge

cartridge without a valve

NOTE 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.

3.3

two piece gas cartridge with valve

cartridge constructed of two pieces with an aperture at the top end into which a male or female valve is fitted

NOTE The gas supply is obtained by the connection of the portable appliance to the valve.

3.4

three piece gas cartridge with valve

cartridge constructed of three pieces with an aperture at the top end into which a male or female valve is fitted

NOTE The gas supply is obtained by the connection of a portable appliance to the valve.