

Krüogeenanumad. Staatilised, ilma vaakumita isoleeritud anumad. Osa 1: Põhinõuded

Cryogenic vessels - Static non-vacuum insulated
vessels - Part 1: Fundamental requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14197-1:2003 sisaldab Euroopa standardi EN 14197-1:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.09.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14197-1:2003 consists of the English text of the European standard EN 14197-1:2003.</p> <p>This document is endorsed on 17.09.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the fundamental requirements for static non-vacuum insulated cryogenic vessels designed for a maximum allowable pressure greater than 0,5 bar. This European Standard applies to static non-vacuum insulated cryogenic vessels for fluids as specified in 3.1. For static non vacuum insulated cryogenic vessels designed for a maximum allowable pressure of not more than 0,5 bar, this European Standard can be used as a guide</p>	<p>Scope:</p> <p>This European Standard specifies the fundamental requirements for static non-vacuum insulated cryogenic vessels designed for a maximum allowable pressure greater than 0,5 bar. This European Standard applies to static non-vacuum insulated cryogenic vessels for fluids as specified in 3.1. For static non vacuum insulated cryogenic vessels designed for a maximum allowable pressure of not more than 0,5 bar, this European Standard can be used as a guide</p>
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ICS 23.020.40

Võtmesõnad: coolers, gas cylinders, ins, insulations, loading, marking, materials, pressure vessels, repeat tests, safety requirements, sample surveys, specification (approval), specifications, static pressure vessels, stickers, surveillance (approval), testing, thermal stress

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English version

Cryogenic vessels - Static non-vacuum insulated vessels - Part 1: Fundamental requirements

Produits cryogéniques - Récipients fixes, non isolés sous
vide - Partie 1: Exigences fondamentales

Kryo-Behälter - Ortsfeste nicht vakuum-isolierte Behälter -
Teil 1: Grundanforderungen

This European Standard was approved by CEN on 2 July 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.



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Foreword

This document (EN 14197-1:2003) has been prepared by Technical Committee CEN/TC 268 “Cryogenic vessels”, 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 February 2004, and conflicting national standards shall be withdrawn at the latest by February 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

For relationship with EC Directive(s), see informative annex ZA, which is an integral part of this document.

EN 14197 consists of the following parts under the general title “*Cryogenic vessels – Static non-vacuum insulated vessels*”:

- *Part 1: Fundamental requirements;*
- *Part 2: Design, fabrication, inspection and testing;*
- *Part 3: Operational requirements.*

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.

1 Scope

This European Standard specifies the fundamental requirements for static non-vacuum insulated cryogenic vessels designed for a maximum allowable pressure greater than 0,5 bar.

This European Standard applies to static non-vacuum insulated cryogenic vessels for fluids as specified in 3.1.

For static non vacuum insulated cryogenic vessels designed for a maximum allowable pressure of not more than 0,5 bar, this European Standard can be used as a guide.

This European Standard is not applicable to vessels built on-site.

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 1252-1, *Cryogenic vessels - Materials - Part 1: Toughness requirements for temperatures below - 80 °C.*

EN 1252-2, *Cryogenic vessels – Materials - Part 2: Toughness requirements for temperatures between - 80 °C and - 20 °C.*

EN 1626, *Cryogenic vessels – Valves for cryogenic service.*

EN 1797, *Cryogenic vessels – Gas/Material compatibility.*

EN 10204:1991, *Metallic products - Types of inspection documents.*

EN 12213, *Cryogenic vessels – Methods for performance evaluation of thermal Insulation.*

EN 13275, *Cryogenic vessels - Pumps for cryogenic service.*

EN 13648-1:-, *Cryogenic vessels – Safety devices for protection against excessive pressure – Part 1: Safety valves for cryogenic service.*

EN 13648-2, *Cryogenic vessels – Safety devices for protection against excessive pressure –Part 2: Bursting disc safety devices for cryogenic service.*

prEN 14197-2, *Cryogenic vessels - Static non vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing.*

prEN 14197-3, *Cryogenic vessels - Static non vacuum insulated vessel - Part 3: Operational requirements.*

3 Terms and definitions

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

3.1

cryogenic fluid (refrigerated liquefied gas)

a gas which is partially liquid because of its low temperature.