

**Meditstiinitarvikute steriliseerimine.  
Nõuded meditsiinitarvikutele  
vastavuseks märgistusele "Steriilne".  
Osa 2: Nõuded aseptiliselt töödeldud  
meditsiinitarvikutele**

Sterilization of medical devices - Requirements for  
medical devices to be designated STERILE - Part  
2: Requirements for aseptically processed medical  
devices

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 556-2:2004 sisaldab Euroopa standardi EN 556-2:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 556-2:2004 consists of the English text of the European standard EN 556-2:2003.</p> <p>This document is endorsed on 18.05.2004 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><b>Käsitlusala:</b> This European Standard specifies the requirements for an aseptically processed medical device to be designated 'STERILE'.</p>	<p><b>Scope:</b> This European Standard specifies the requirements for an aseptically processed medical device to be designated 'STERILE'.</p>
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**Võtmesõnad:** medical instruments, medical products, medical sciences, medicine, packages, packing, production, quality assurance, safety, specification (approval), specifications, steam, sterile, sterile equipment, sterilization, sterilization (hygiene), sterility, vapours

**English version**

Sterilization of medical devices

**Requirements for medical devices to be designated 'STERILE'**

**Part 2: Requirements for aseptically processed medical devices**

Stérilisation des dispositifs médicaux –  
Exigences relatives aux dispositifs médicaux en vue d'obtenir l'étiquetage  
'STERILE' – Partie 2: Exigences pour  
les dispositifs médicaux préparés aseptiquement

Sterilisation von Medizinprodukten –  
Anforderungen an Medizinprodukte,  
die als „STERIL“ gekennzeichnet werden – Teil 2: Anforderungen an aseptisch hergestellte Medizinprodukte

This European Standard was approved by CEN on 2003-10-01.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

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

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## Foreword

This document (EN 556-2:2003) has been prepared by Technical Committee CEN/TC 204 "Sterilization of medical devices", the secretariat of which is held by BSI.

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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 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 EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

This standard has been considered by CEN/TC 204 as one of a sequence of European Standards concerned with sterilization processes and their control. The other standards in this series are:

EN 550	Sterilization of medical devices -Validation and routine control of ethylene oxide sterilization.
EN 552	Sterilization of medical devices -Validation and routine control of sterilization by irradiation
EN 554	Sterilization of medical devices -Validation and routine control of moist heat sterilization
EN 556-1	Sterilization of medical devices - Requirements for medical devices to be designated "Sterile" - Part 1: Requirements for terminally-sterilized medical devices
EN 1174	Sterilization of medical devices - Estimation of the population of micro-organisms on product
EN ISO 14160	Sterilization of single uses medical devices incorporating materials of animal origin - Validation and routine control of the sterilization by liquid chemical sterilants (ISO 14160:1998)
EN ISO 14937	Sterilization of health care products - General requirements for characterization of a sterilizing agent and the development, validation and routine control of a sterilization process for medical devices (ISO 14937:2000)
prEN 13824	Sterilization of medical devices - Validation and routine control of aseptic processes - Requirements and guidance (in preparation)

Annexes designated 'informative' are given only for information. In this standard annex ZA is informative.

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

Medical devices designated 'STERILE' are prepared using appropriate and validated methods. Whenever possible, sterile medical devices are terminally-sterilized using a properly validated and controlled sterilization process (see EN 556-1, EN 550, EN 552, EN 554 and EN ISO 14937). When a medical device is intended to be sterile but cannot be terminally-sterilized, aseptic processing is the method of manufacture (see prEN 13824 and EN ISO 14160).

Aseptic processing requires that either

- i) the entire product is sterilized and then introduced into a sterilized package; or,
- ii) components of the product are sterilized, then further processed/assembled, and the final product packed into a sterilized package.

Processing and packaging are carried out in a manner that minimizes the opportunity for items to become recontaminated and in a controlled environment in which microbial and particulate levels are maintained at or below defined limits and human intervention is minimized.

NOTE: EN 980 specifies the label applied to aseptically processed medical devices as STERILE.

## 1 Scope

This European Standard specifies the requirements for an aseptically processed medical device to be designated 'STERILE'.

NOTE For the purpose of the EU Directive(s) for medical devices (see Bibliography), designating that a medical device is 'STERILE' is only permissible when a validated sterilization process has been applied. Requirements for validation and routine control of aseptic processes are specified in prEN 13824 (in preparation).

## 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 550, *Sterilization of medical devices - Validation and routine control of ethylene oxide sterilization*
- EN 552, *Sterilization of medical devices - Validation and routine control of sterilization by irradiation*
- EN 554, *Sterilization of medical devices - Validation and routine control of sterilization by moist heat*
- EN ISO 13485, *Medical devices - Quality management systems - Requirements for regulatory purposes (ISO 13485:2003)*

## 3 Terms and definitions

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

### 3.1

#### **aseptic processing**

handling and filling of sterile containers and devices, or their components, in a controlled environment in which the air supply, materials, equipment and personnel are regulated to control microbial and particulate contamination to acceptable levels.

NOTE Aseptic processing can include formulation (compounding), filtration and filling into pre-sterilized containers.

### 3.2

#### **bioburden**

population of viable micro-organisms on a product and/or package

### 3.3

#### **media fills**

simulation of an aseptic process in which a microbial growth medium is used to assess the effectiveness of the controls applied