

## **Biotechnology - Performance criteria for microbiological safety cabinets**

Biotechnology - Performance criteria for  
microbiological safety cabinets

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12469:2000 sisaldab Euroopa standardi EN 12469:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 13.10.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12469:2000 consists of the English text of the European standard EN 12469:2000.</p> <p>This document is endorsed on 13.10.2000 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 basic safety requirements for microbiological safety cabinets (MSCs) with respect to safety and hygiene.</p>	<p><b>Scope:</b> This European Standard specifies basic safety requirements for microbiological safety cabinets (MSCs) with respect to safety and hygiene.</p>
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**English version**

Biotechnology

**Performance criteria for microbiological safety cabinets**

Biotechnologie – Critères de performance pour les postes de sécurité microbiologique

Biotechnik – Leistungskriterien für mikrobiologische Sicherheitswerkbanken

This European Standard was approved by CEN on 2000-01-03.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat 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, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

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

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

<b>Contents</b>	<b>Page</b>
<b>Foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>4</b>
<b>2 Normative references</b> .....	<b>4</b>
<b>3 Definitions</b> .....	<b>5</b>
<b>4 Hazards</b> .....	<b>6</b>
<b>5 Performance classes</b> .....	<b>6</b>
<b>7 Safety requirements</b> .....	<b>12</b>
<b>8 Marking and packaging</b> .....	<b>13</b>
<b>9 Documentation</b> .....	<b>14</b>
<b>Annex A (informative) Guidance on materials, design and manufacture</b> .....	<b>15</b>
<b>Annex B (normative) Test method for leakage of carcass for class I and II MSCs</b> .....	<b>18</b>
<b>Annex C (normative) Test methods for the retention efficiency at the front aperture</b> .....	<b>19</b>
<b>Annex D (informative) Aerosol challenge test method for installed HEPA filter system leakage detection</b> .....	<b>30</b>
<b>Annex E (normative) Test method for product protection for class II MSCs</b> .....	<b>32</b>
<b>Annex F (normative) Test method for cross contamination protection for class II MSCs</b> .....	<b>34</b>
<b>Annex G (informative) Method of measurement of volumetric airflow rate</b> .....	<b>36</b>
<b>Annex H (informative) Design of MSCs and airflow velocities in MSCs</b> .....	<b>38</b>
<b>Annex J (informative) Recommendations for decontamination, cleaning and fumigation of MSCs and filters</b> .....	<b>40</b>
<b>Annex K (informative) Recommendations for routine maintenance of MSCs</b> .....	<b>42</b>
<b>Bibliography</b> .....	<b>44</b>

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 233 "Biotechnology", 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 2000, and conflicting national standards shall be withdrawn at the latest by November 2000.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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## Introduction

Microbiological safety cabinets are intended to reduce the risk to the operator when handling hazardous or potentially hazardous microorganisms. They do not necessarily protect the operator from all hazards involved. Some types of safety cabinet can also protect the materials being handled in them from environmental contamination.

### 1 Scope

This European Standard specifies basic requirements for microbiological safety cabinets (MSCs) with respect to safety and hygiene.

This European Standard sets the minimum performance criteria for safety cabinets for work with microorganisms and specifies test procedures for microbiological safety cabinets with respect to protection of the worker and the environment, product protection and cross contamination. Mechanical, electrical, chemical or radioactive safety precautions are not covered in the standard but are covered in EN 61010-1, EN 292-1 and EN 292-2 (see Bibliography [1], [2] and [3]).

This European Standard does not cover safety precautions for aspects not associated with the use of microorganisms such as those covering mechanical and electrical hazards, which are covered in EN 61010-1 (see Bibliography [1]), nor does it cover safety requirements regarding flammable gas and inert gases.

NOTE Some features of MSCs in addition to those for performance and safety are given for guidance in this European Standard and in EN 12741 (see Bibliography [4]).

### 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.

EN 1822-1	High efficiency air filters (HEPA and ULPA) - Part 1 : Classification, performance testing, marking
EN 12296	Biotechnology - Equipment - Guidance on testing procedures for cleanability
EN 12297	Biotechnology - Equipment - Guidance on testing procedures for sterilizability
EN 12298	Biotechnology - Equipment - Guidance on testing procedures for leaktightness
EN 13091:1999	Biotechnology - Performance criteria for filter elements and filtration assemblies