

**Biotehnoloogia. Suuremahuline
protsess ja suurtootmine. Juhised
jätmete käitlemiseks,
inaktiveerimiseks ja katsetamiseks**

Biotechnology - Large scale process and production
- Guidance for the handling, inactivating and testing
of waste

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12461:1999 sisaldab Euroopa standardi EN 12461:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12461:1999 consists of the English text of the European standard EN 12461:1998.</p> <p>This document is endorsed on 12.12.1999 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: Käesolev standard esitab juhendi biotehnoloogiaseadmetest pärinevate jäätmeid töötlevate mikroorganismide käitlemisprotseduuride hindamiseks ja valimiseks, et tagada inimeste ja keskkonna ohutus.</p>	<p>Scope:</p>
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ICS 07.080, 13.030.30

Võtmesõnad: biotehnoloogia, desinfitseerimine, heitgaasid, heitveed, jäätmed, jäätmekäitlus, keskkonnakaitse, kiirgus, ohud, steriliseerimine, tahked ained, tuhastamine (jäätmed), tööohutus, õnnetuste vältimine

ICS 07.080; 13.030.01

Descriptors: Biotechnology, processes, waste.

English version

Biotechnology – Large-scale process and production

Guidance for the handling, inactivating and testing of waste

Biotechnologie – Procédé à grande échelle et production – Guide pour la manipulation, l'inactivation et le contrôle des déchets

Biotechnik – Verfahren im Großmaßstab und Produktion – Leitfaden zur Handhabung, Inaktivierung und Prüfung von Abfall

This European Standard was approved by CEN on 1998-01-31.

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 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.

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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 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 August 1998, and conflicting national standards shall be withdrawn at the latest by August 1998.

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.

Introduction

This European Standard supports industrial activities in the area of biotechnology covering operations both non genetically modified and genetically modified microorganisms and with both non-pathogenic and pathogenic microorganisms (see annex C [1] [2]).

International, national and local rules, guidelines, safety regulations and instruction manuals that deal with the handling of microorganisms in all steps of fermentation and downstream processes, as well as those used in environmental biotechnology should be considered.

1 Scope

This European Standard gives guidance on the assessment and the selection of procedures for treatment of waste process microorganisms from biotechnological plant to ensure the safety of people and environment.

This European Standard applies to wastes and effluents (solid, liquid and gaseous) emitted from biotechnological processes which include traditional processes such as brewing or food processing, fermentation for pharmaceutical and chemical products as well as biotechnological processes for environmental and agricultural application.

This European Standard for biotechnological processes is only applicable until gas, liquids and solids are ready for safe transfer to normal industrial or municipal waste handling units.

This European Standard is not applicable to the waste from hospital and treatment of chemical and physical hazardous waste.

NOTE : Attention is drawn to relevant national regulations.

2 Definitions

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

2.1 biohazardous waste

Biological waste which can cause a hazard.

2.2 cell culture

In vitro growth of cells derived from multicellular organisms.

2.3 disinfectant

Chemical agent which is able to reduce the number of viable microorganisms.

2.4 disinfection

Process of reducing the number of viable microorganisms by various physical and chemical methods.