Biotechnology - Laboratories for research, development and analysis - Guidance for handling, inactivating and testing of waste

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12740:2000 sisaldab Euroopa standardi EN 12740:1999 ingliskeelset teksti. Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12740:2000 consists of the English text of the European standard EN 12740:1999. This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard gives guidance on methods for handling, inactivating and testing of waste containing microorganisms arising from biotechnology and microbiology laboratory activities and processes.	**Scope:** This European Standard gives guidance on methods for handling, inactivating and testing of waste containing microorganisms arising from biotechnology and microbiology laboratory activities and processes.

ICS 07.080, 07.100.01, 13.030.30

Võtmesõnad:

EUROPEAN STANDARD
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English version

Biotechnology – Laboratories for research, development and analysis

Guidance for handling, inactivating and testing of waste

Biotechnologie – Laboratoires de recherche, développement et analyse – Guide pour la manipulation, l'inactivation et le contrôle des déchets

Biotechnik – Laboratorien für Forschung, Entwicklung und Analyse – Leitfaden für die Behandlung, Inaktivierung und Prüfung von Abfällen

This European Standard was approved by CEN on 1999-06-14.

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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.

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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 January 2000, and conflicting national standards shall be withdrawn at the latest by January 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.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

Introduction

Compliance with this European Standard will minimize the risks associated with the collection, storage, packaging, intra-laboratory transport, treatment and disposal of waste including effluent and those arising from the treatment for re-use or recycling of contaminated items, equipment and materials.

This European Standard aims to harmonize the treatment of waste containing hazardous organisms. More extensive National and international legislative provisions should be observed. The principles for laboratories established in this European Standard are consistent with those relevant to large scale biotechnology processes.

The presence of hazardous organisms among the waste and the way in which it is handled should be determined by risk assessment in accordance with the National and European (see annex B [1], [2]) regulations.

1 Scope

This European Standard gives guidance on methods for handling, inactivating and testing of waste containing organisms arising from biotechnology laboratory activities and processes.

It is concerned with methods to reduce the risks arising from exposure to waste derived from laboratory-scale activities which contains organisms hazardous or potentially hazardous to humans, animals, plants or the environment. Such waste may include organisms whether as solid, liquid or gaseous by-products or effluent, together with items or equipment required to be disposed of and which may be contaminated with organisms.

Wastes may be generated by biotechnology, clinical, molecular biology, microbiology and other laboratories in activities where organisms are handled, genetically modified organisms are created or used or by laboratory processes involving material of human, animal or plant origin. This European Standard does not apply to other types of waste or waste from human healthcare or other medical treatment activities.

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 285	Sterilization - Steam sterilizers - Large sterilizers
EN 866-1	Biological systems for testing sterilizers and sterilization processes - Part 1 : General requirements
EN 12128	Biotechnology - Laboratories for research, development and analysis - Containment levels of microbiology laboratories, areas of risk, localities and physical safety requirements.

EN 61010-2-041 Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-041 : Particular requirements for autoclaves using steam for the treatment of medical materials and for laboratory processes [IEC 61010-2-041:1996]

EN 12347 Biotechnology - Performance criteria for steam sterilizers and autoclaves

3 Definitions

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

3.1 biohazardous waste

Biological waste which can cause a hazard.

3.2 decontamination

Removal of microbiological contamination or reduction to an acceptable level.

3.3 disinfectant

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

3.4 disinfection

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

3.5 disposal

Intentional and final burial, deposit, discharge, dumping, placing or release of any waste material into or on any air, land or water.

3.6 hazard

Intrinsic potential property or ability of something (e.g. any agent, equipment, material or process) to cause harm [EN 1620].

NOTE : Harm is an injury or damage to health of people and/or to the environment.

3.7 inactivation

Partial or full destruction of a given activity up to destruction of the microbiological system.