



Biotechnology - Equipment - Guidance on testing procedures for sterilizability

Biotechnologie - Equipment - Guide des procédures d'essai pour le contrôle de la capacité à la stérilisation

Biotechnik - Geräte und Ausrüstungen - Leitfaden für Verfahren zur Prüfung der Sterilisierbarkeit

Tato norma přejímá anglickou verzi evropské normy EN 12297:1998. Evropská norma EN 12297:1998 má status české technické normy.

This standard implements the English version of European Standard EN 12297:1998. The European Standard EN 12297:1998 has the status of a Czech Standard.

© Český normalizační institut, 1999

Podle zákona č. 22/1997 Sb. smějí být české technické normy rozmnožovány a rozšiřovány jen se souhlasem Českého normalizačního institutu.

53941

Strana 2

---

## **Národní předmluva**

## **Vypracování normy**

Zpracovatel: RNDr. Ljuba Schlemmerová, CSc., IČO 43060927

Pracovník Českého normalizačního institutu: Ing. Ivana Zittová

ICS

Descriptors: biotechnology, medical equipment, sterilization, disinfection, contamination, micro-organisms, noxious microorganisms, tests, safety, hygiene conditions, inspection, accident prevention, environmental protection, work safety

English version

**Biotechnology - Equipment - Guidance on testing procedures for sterilizability**

Biotechnologie - Equipment - Guide des procédures d'essai pour le contrôle de la capacité à la stérilisation

Biotechnik - Geräte und Ausrüstungen - Leitfaden für Verfahren zur Prüfung der Sterilisierbarkeit

This European Standard was approved by CEN on 2 March 1998.

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.

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 Central Secretariat 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway,

Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

---

© 1998 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 12297:1998 E

Strana 4

---

<b>Obsah</b>	<b>strana</b>
<b>Contents</b>	
<b>Foreword</b>	<b>3</b>
<b>1 Scope</b>	<b>3</b>
<b>2 Definitions</b>	<b>3</b>
<b>3 Testing</b>	<b>5</b>
<b>4 Documentation</b>	<b>7</b>
<b>Annex A (informative) Guidance on selection of sterilizability testing</b>	<b>8</b>
<b>Annex B (informative) Information on test methods for sterilizability</b>	<b>12</b>
<b>Annex C (informative) Bibliography</b>	<b>15</b>

Strana 5

---

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

## **1 Scope**

This European Standard gives guidance on general testing procedures to assess the sterilizability for microorganisms equipment (components and units of equipment) used in biotechnological processes.

This European Standard gives guidance on the assessment of the sterilizability of biotechnological equipment with respect to a release of process microorganisms that can affect the safety of the worker (occupational health) and/or that can have adverse effects to the environment.

This European Standard is applicable to plants or components, such as valves and fittings, tanks, pumps, piping, separating and filling devices as well as instrumentation in contact with process fluids.

This European Standard applies if the intended use of the equipment includes hazardous or potentially hazardous microorganisms.

This European Standard is not applicable to testing for sterility of media and equipment prior to processing or operation, respectively.

NOTE 1: For disinfection of external surfaces such as walls, working benches and floors, attention is drawn to national and European Standards.

NOTE 2: For sterilization of equipment and media in autoclaves attention is drawn to national and European standards such as EN 285 and EN 554 (see annex [21], [22]).

---

**-- Vynechaný text --**