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**Sterila injektionssprutor för engångsbruk –
Del 4: Sprutor med skydd mot återanvändning (ISO 7886-4:2018)**

**Sterile hypodermic syringes for single use –
Part 4: Syringes with re-use prevention feature (ISO 7886-4:2018)**

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Europastandarden EN ISO 7886-4:2019 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 7886-4:2019.

Denna standard ersätter SS-EN ISO 7886-4:2009, utgåva 2

The European Standard EN ISO 7886-4:2019 has the status of a Swedish Standard. This document contains the official version of EN ISO 7886-4:2019.

This standard supersedes the SS-EN ISO 7886-4:2009, edition 2

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EUROPEAN STANDARD

EN ISO 7886-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 11.040.25

Supersedes EN ISO 7886-4:2009

English Version

Sterile hypodermic syringes for single use - Part 4: Syringes with re-use prevention feature (ISO 7886- 4:2018)

Seringues hypodermiques stériles, non réutilisables -
Partie 4: Seringues avec dispositif empêchant la
réutilisation (ISO 7886-4:2018)

Sterile Injektionskanülen für den Einmalgebrauch -
Teil 4: Spritzen mit Vorrichtung zur Verhinderung der
Wiederverwendung (ISO 7886-4:2018)

This European Standard was approved by CEN on 1 March 2019.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 7886-4:2019) has been prepared by Technical Committee ISO/TC 84 "Devices for administration of medicinal products and catheters" in collaboration with Technical Committee CEN/TC 205 "Non-active medical devices" the secretariat of which is held by DIN.

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 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 7886-4:2009.

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 7886-4 (EQV) has been approved by CEN as EN ISO 7886-4:2019 without any modification.

Introduction

The preparation of this document was recognized as a high priority requirement to prevent intentional (misuse) or accidental reuse of syringes. Re-use of injection equipment in the absence of sterilization has increasingly led to transmission of blood-borne pathogens. See Reference [5] in the Bibliography.

The World Health Organisation (WHO) had produced a specification for syringes that are rendered inactive after use [commonly referred to as “auto-disable” (AD) syringes] for both fixed dose immunization and syringes with re-use prevention features for general/curative purposes and the reconstitution of vaccines. For the purpose of this document, auto disabled is used for the feature of type 1 re-use prevention which operates automatically during or upon completion of the intended single use. Both the WHO and ISO agreed that additional parts of ISO 7886 would be required to cover syringes with re-use prevention features, while leaving in place ISO 7886-1 and ISO 7886-2 without modification, as a large number of devices in common use would not be intended to comply with the re-use prevention properties suggested.

This document is intended to cover syringes that are rendered inoperable, either during or upon completion or after delivery of the intended dose. These syringes are not covered by ISO 7886-1 and ISO 7886-3. ISO 7886-2 covers syringes used with power-driven pumps. Given the diversity of clinical applications, the most appropriate re-use prevention feature offering the highest level of re-use prevention is to be considered for each specific intended use.

It is recognized that syringes designed to reduce the risk of needle-stick injuries can also comply with this document with regard to their re-use prevention properties, but it is stressed that anti-needle-stick properties of syringes are not in themselves addressed in this document.

Guidance on transition periods for implementing the requirements of this document is given in ISO/TR 19244.

Sterile hypodermic syringes for single use —

Part 4: Syringes with re-use prevention feature

1 Scope

This document specifies requirements for sterile single-use hypodermic syringes made of plastic and rubber materials with or without needle, and intended for the aspiration of fluids or for the injection of fluids immediately after filling and of design such that the syringe can be rendered unusable after use.

This document is not applicable to syringes made of glass [specified in ISO 595 (withdrawn)], auto-disable syringes for fixed dose immunization (ISO 7886-3) and syringes designed to be pre-filled. It does not address compatibility with injection fluids. Other standards can be applicable when syringes are used for any other intended purpose than those specified in this document.

NOTE Syringes designed to reduce the risk of needle-stick injuries can also comply with this document with regard to their re-use prevention properties, but it is stressed that anti-needle-stick properties of syringes are not in themselves addressed in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 7864:2016, *Sterile hypodermic needles for single use — Requirements and test methods*

ISO 7886-1:2017, *Sterile hypodermic syringes for single use — Part 1: Syringes for manual use*

ISO 8537:2016, *Sterile single-use syringes, with or without needle, for insulin*

ISO 9626, *Stainless steel needle tubing for the manufacture of medical devices — Requirements and test methods*

ASTM D999-01, *Standard methods for vibration testing of shipping containers*

ASTM D5276-98, *Standard test method for drop test of loaded containers by free fall*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 7886-1, ISO 8537 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <http://www.electropedia.org/>

3.1

re-use prevention feature

feature that either automatically activates upon or during administration of the intended dose or is activated by the user to prevent subsequent re-use of the syringe