# INTERNATIONAL STANDARD



First edition 1991-05-01

AMENDMENT 1 2000-11-01

# Sterile single-use syringes, with or without needle, for insulin

AMENDMENT 1

Seringues à insuline stériles non réutilisables avec ou sans aiguille iTeh Same Dement RD PREVIEW (standards.iteh.ai)

<u>ISO 8537:1991/Amd 1:2000</u> https://standards.iteh.ai/catalog/standards/sist/e51c6433-eaad-48e6-be91-54acba634e46/iso-8537-1991-amd-1-2000



Reference number ISO 8537:1991/Amd.1:2000(E)

#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 8537:1991/Amd 1:2000</u> https://standards.iteh.ai/catalog/standards/sist/e51c6433-eaad-48e6-be91-54acba634e46/iso-8537-1991-amd-1-2000

© ISO 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.ch Web www.iso.ch Printed in Switzerland

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

Amendment 1 to International Standard ISO 8537:1991 was prepared by Technical Committee ISO/TC 84, *Medical devices for injections*.

Amendment 1 to ISO 8537:1991 was submitted to an ISO/CEN parallel enquiry in 1998, and aimed at taking into account shorter and thinner needles which are extensively used throughout the world, by modification of some clauses of ISO 8537. It relied on ISO 9626:1991, *Stainless steel needle tubing for the manufacture of medical devices*, which is under amendment to include the new sizes of needle tubing.

As the amendment of ISO 9626:1991 has been delayed, this amendment to ISO 8537 is independent of the text of ISO 9626. It is not applicable to needle tubing of 0,38 mm outside diameter because this size is not included in ISO 9626.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 8537:1991/Amd 1:2000</u> https://standards.iteh.ai/catalog/standards/sist/e51c6433-eaad-48e6-be91-54acba634e46/iso-8537-1991-amd-1-2000

### Sterile single-use syringes, with or without needle, for insulin

### AMENDMENT 1

Page 1

#### **Clause 2 Normative references**

Add "ISO 9626, Stainless steel needle tubing for manufacture of medical devices".

#### Definition 3.1

Change "gratuated" to "graduated".

Page 5

#### Clause 13 Needles

#### ISO 8537:1991/Amd 1:2000

**iTeh STANDARD PREVIEW** 

(standards.iteh.ai)

Change the title to "**Needle tubing and needles**". Delete the entire text, and substitute the following new text. 54acba634e46/iso-8537-1991-and-1-2000

#### 13.1 Needles for syringes of types 3 and 4

Needles for syringes of types 3 and 4 shall be in accordance with ISO 7864, except for the dimensions and test parameters which shall be in accordance with annex D of this International Standard.

#### 13.2 Needle tubing for syringes of types 5, 6, 7 and 8

Needle tubing for syringes of types 5, 6, 7 and 8 shall be in accordance with ISO 9626, except for the dimensions and test parameters which shall be in accordance with annex D of this International Standard. The needle point shall be in accordance with ISO 7864.

NOTE ISO 9626:1991 is at present undergoing amendment; the values in annex D (see below) are taken from the most recent draft. Some values therefore differ from those given in ISO 7864:1993 and ISO 9626:1991. When the ISO 9626 amendment is published, clause 13 and annex D of this International Standard may be replaced by a normative cross-reference to ISO 7864 and amended ISO 9626.

Page 12

#### Annex D

Delete the entire annex D and substitute the following.

### Annex D

(normative)

### Properties of needles and needle tubing

#### **D.1** The diameters of the needle tubing shall be in accordance with Table D.1.

0.14			
Outside diameter		Minimum inside	
min.	max.	diameter	
0,254	0,267	0,114	
0,298	0,320	0,133	
0,324	0,351	0,133	
0,349	0,370	0,133	
$Coh  S^{0,400}  ND  A$		0,184	
0,440	0,470	0,232	
<sup>a</sup> The nominal outside diameters correspond to gauge numbers as follows: 0,25 mm (gauge 31), 0,30 mm (gauge 30), 0,33 mm (gauge 29), 0,36 mm (gauge 28), 0,40 mm (gauge 27) and 0,45 mm (gauge 26). ISO 8537:1991/Amd 1:2000			
	min. 0,254 0,298 0,324 0,349 <b>Teh S<sup>0,400</sup> NDA</b> 0,440 diameters correspond to 33 mm (gauge 29), 0,36 m	min. max.   0,254 0,267   0,298 0,320   0,324 0,351   0,349 0,370   Ceh Solution of the	

#### Table D.1 — Diameters of needle tubing

https://standards.iteh.ai/catalog/standards/sist/e51c6433-eaad-48e6-be91-54acba634e46/iso-8537-1991-amd-1-2000

**D.2** The stiffness of the needle tubing shall be in accordance with Table D.2 when tested as described in ISO 9626.

Nominal outside diameter	<b>Span</b> mm ± 0,1	Force N ± 0,1	Maximum deflection mm
0,25	3,5	5,5	0,35
0,30	5,0	5,5	0,40
0,33	5,0	5,5	0,32
0,36	5,0	5,5	0,25
0,40	9,5	5,5	0,60
0,45	10,0	6,0	0,56

#### Table D.2 — Stiffness

**D.3** The minimum strength of the bond between the hub/syringe and the needle tubing shall be 22 N when tested in accordance with ISO 7864.

**D.4** The stylet diameter to test the patency of the lumen as described in ISO 7864 shall be in accordance with Table D.3.

	Dimensions in millimetres
Nominal outside diameter	Diameter of stylet 0 -0,01
0,25	0,08
0,30	0,11
0,33	0,11
0,36	0,11
0,40	0,15
0,45	0,18

#### Table D.3 — Size of stylet to test patency of lumen

D.5 The resistance to breakage shall be assessed in accordance with Table D.4 when tested as described in ISO 9626. (standards.iteh.ai)

### Table D.4 ---- Resistance to breakage

https://standards.iteh.ai/catalog/standards/sist/e51cDimensions/in/millimetres

Nominal outside diameter	Distance between rigid supports and application of bending force	
	± 0,1	
0,25	8	
0,30	8	
0,33	8	
0,36	8	
0,40	8	
0,45	10	

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 8537:1991/Amd 1:2000</u> https://standards.iteh.ai/catalog/standards/sist/e51c6433-eaad-48e6-be91-54acba634e46/iso-8537-1991-amd-1-2000

ICS 11.040.20 Price based on 3 pages