

LOODUSLIKUST LATEKSKUMMIST MEESTE
KONDOOMID.
NÕUDED JA KATSEMEETODID

Natural rubber latex male condoms -
Requirements and test methods
(ISO 4074:2015)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4074:2015 sisaldab Euroopa standardi EN ISO 4074:2015 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4074:2015 consists of the English text of the European standard EN ISO 4074:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.11.2015.	Date of Availability of the European standard is 11.11.2015.
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English Version

Natural rubber latex male condoms - Requirements and test methods (ISO 4074:2015)

Préservatifs masculins en latex de caoutchouc naturel -
Exigences et méthodes d'essai (ISO 4074:2015)

Kondome aus Naturkautschuklatex - Anforderungen
und Prüfverfahren (ISO 4074:2015)

This European Standard was approved by CEN on 16 July 2015.

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

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European foreword

This document (EN ISO 4074:2015) has been prepared by Technical Committee ISO/TC 157 "Non-systemic contraceptives and STI barrier prophylactics" 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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by November 2017.

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

This document supersedes EN ISO 4074:2002.

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

The following referenced documents are indispensable for the application of this document. For undated references, the latest edition of the referenced document (including any amendments) applies. For dated references, only the edition cited applies. However, for any use of this standard 'within the meaning of Annex ZA', the user should always check that any referenced document has not been superseded and that its relevant contents can still be considered the generally acknowledged state-of-art.

When an IEC or ISO standard is referred to in the ISO standard text, this shall be understood as a normative reference to the corresponding EN standard, if available, and otherwise to the dated version of the ISO or IEC standard, as listed below.

NOTE The way in which these referenced documents are cited in normative requirements determines the extent (in whole or in part) to which they apply.

Table 1 — Correlation between normative references and dated EN and ISO or IEC standards

Normative references as listed in Clause 2 of the ISO standard	Equivalent dated standard	
	EN	ISO or IEC
ISO 2859-1	---	ISO 2859-1:1999 + Cor1:2001
ISO 10993-1	EN ISO 10993-1:2009	ISO 10993-1:2009
ISO 10993-5	EN ISO 10993-5:2009	ISO 10993-5:2009
ISO 10993-10	EN ISO 10993-1:2013	ISO 10993-1:2010
ISO 15223-1	EN ISO 15223-1:2012	ISO 15223-1:2012
ISO 15223-2	---	ISO 15223-2:2010
ISO/IEC 17025	EN ISO/IEC 17025:2005	ISO/IEC 17025:2005

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4074:2015 has been approved by CEN as EN ISO 4074:2015 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 93/42/EEC on Medical Devices

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Medical Devices Directive 93/42/EEC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1— Correspondence between this European Standard and the Essential Requirements of EU Directive 93/42/EEC as amended for medical devices

Clause(s)/sub-clause(s) of this European Standard	Essential requirements (ERs) of EU Directive 93/42/EEC	Qualifying remarks/Notes
6, 7, 14, 15	7.2	Clauses 6, 7, 14 and 15 provide a presumption of conformity with the Essential Requirements relating to the risk posed by contaminants and residues to persons involved in the transport, storage and use of the devices.
6, 15.2.4.2	7.3	Clause 15.2.4.2 includes requirements for information to users regarding use of additional lubricants with condoms.
6, 15.2.4.2	7.4	This standard does not consider the systemic safety and usefulness of any ancillary medicinal substance that could be incorporated into the condom.
6	7.5	
7	8.1	Condoms are not sterile devices but manufacturers should take steps to control microbial contamination.
14, 15.1	8.6	
15.2	13.1	
15.2.2, 15.2.4.1, 15.2.4.2,	13.2	
15.2.3, 15.2.4.1, 15.2.4.2, 15.2.5	13.3	
15.2.4.1, 15.2.4.2	13.4	
15.2.3, 15.2.4.1	13.5	

15.2.4.2, 15.2.5	13.6	
Annexes, which provide details of test methods, have not been included as the all the requirements are included above.		

WARNING — Other requirements and other EU Directives may be applicable to the products falling within the scope of this European Standard.

Contents

Page

Foreword	v
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Quality verification	3
5 Lot size	3
6 Biocompatibility	4
7 Microbial contamination	4
8 Product claims	4
9 Design	4
9.1 Integral bead	4
9.2 Lubrication	4
9.3 Dimensions	5
9.3.1 Length	5
9.3.2 Width	5
9.3.3 Thickness	5
10 Bursting volume and pressure	5
11 Stability and shelf life	6
11.1 General	6
11.2 Minimum stability requirements	6
11.3 Procedure for determining shelf life by real-time stability studies	7
11.4 Estimating shelf life based upon accelerated stability studies	7
12 Freedom from holes	7
13 Visible defects	8
14 Package integrity of individual container	8
15 Packaging and labelling	8
15.1 Packaging	8
15.2 Labelling	8
15.2.1 General	8
15.2.2 Symbols	8
15.2.3 Individual container	8
15.2.4 Consumer package	9
15.2.5 Condoms not distributed in consumer packages	11
15.3 Inspection	11
16 Test report	11
Annex A (normative) Sampling plans intended for assessing compliance of a continuing series of lots of sufficient number to allow the switching rules to be applied	12
Annex B (informative) Sampling plans intended for assessing compliance of isolated lots	14
Annex C (normative) Determination of total lubricant for condoms in individual containers	16
Annex D (normative) Determination of length	20
Annex E (normative) Determination of width	22
Annex F (normative) Determination of thickness	23
Annex G (informative) Determination of microbial contamination	26

Annex H (normative) Determination of bursting volume and pressure	31
Annex I (normative) Oven treatment for condoms	33
Annex J (informative) Determination of force and elongation at break of test pieces of condoms	34
Annex K (normative) Determination of shelf life by real-time stability studies	37
Annex L (informative) Guidance on conducting and analysing accelerated ageing studies	40
Annex M (normative) Testing for holes	42
Annex N (normative) Testing for package integrity	48
Annex O (informative) Calibration of air inflation equipment for determination of bursting volume and pressure	50
Annex P (informative) Recommendations for testing condoms that fall outside of the size ranges specified in ISO 4074	54
Bibliography	56

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 157, *Non-systemic contraceptives and STI barrier prophylactics*.

This third edition cancels and replaces the second edition (ISO 4074:2014), which has been technically revised. The modifications are as follows:

- a) The maximum lot size has been limited to 500 000.
- b) Specific requirements for biocompatibility assessments, as defined in ISO 10993-1, have been added.
- c) It is recommended that manufacturers establish procedures for the periodic monitoring of microbial contamination (bioburden) as part of their quality management system including requirements for the absence of specific pathogens and limits for total viable counts on finished condoms; methods of determining bioburden levels on condoms are given in [Annex G](#).
- d) Specific requirements for extra strength condoms have been deleted but there is now a general requirement for manufacturers to justify any additional claims made for their products; claims relating to improved efficacy or safety have to be substantiated by clinical investigation.
- e) A minimum airburst volume of 28,0 dm³ has been introduced for condoms with mid-body widths that are greater than or equal to 65,0 mm and not more than 75,0 mm.
- f) The radius of the inner edge of the clamping collar wherever it contacts the inflated condom has to be a minimum of 2 mm ([Annex H](#)).
- g) The volumes of electrolyte used in the electrical test for determining freedom from holes described in [Annex M](#) have been brought into line with the volumes used for the water leak test.
- h) The volumes of water or electrolyte specified in the freedom from holes test have been increased for condoms that have mid-body widths greater than or equal to 56 mm and/or are longer than 210 mm.
- i) When conducting the electrical test for freedom from holes, the voltage is now measured from the time that the condom is first immersed and for up to 10 s after full immersion.

- j) The method of testing for freedom from holes specified in ASTM D3492[8] has been included by reference.
- k) A limit has been introduced for the number of individual containers with visibly open seals, to be evaluated when the containers are inspected during the freedom from holes test described in [Annex M](#).
- l) Recommended requirements for minimum airburst properties and freedom from holes testing for condoms narrower than 45 mm and/or shorter than 160 mm have been introduced in informative [Annex P](#) to provide guidance to regulatory authorities, notified bodies and other interested parties when assessing condoms that fall outside of the normative size range specified in this International Standard.
- m) Amendments have been made to the methods for determining the shelf life of condoms including a simplified procedure for determining the shelf life by accelerated stability studies based on fixed ageing periods at 50 °C.
- n) Testing for freedom from holes, airburst properties, and package integrity are required when conducting stability studies to establish that condoms meet the minimum stability requirements specified in this International Standard and when determining condom shelf lives.
- o) The procedure for determining the thickness of a condom by the micrometer method is described in detail.
- p) An alternative method of removing the lubricant from the condom using an aqueous surfactant solution has been introduced into the method for determining the amount of lubricant on the condom.
- q) Revisions have been made to labelling requirements including the additional information supplied with the condom.

Regulatory agencies, notified bodies, and purchasers should consider the need for a transition period when implementing the requirements of this International Standard to allow manufacturers to make the changes required to maintain compliance. This applies particularly to the changes in packaging and labelling specified in [Clause 15](#).