

## **Kliinilised termomeetrid. Osa 1: Maksimumseadmega metalsed vedeliktermomeetrid**

Clinical thermometers - Part 1: Metallic liquid-in-glass thermometers with maximum device

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12470-1:2000 sisaldab Euroopa standardi EN 12470-1:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.07.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12470-1:2000 consists of the English text of the European standard EN 12470-1:2000.</p> <p>This document is endorsed on 17.07.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This part of the standard specifies performance requirements and test methods for clinical liquid-in-glass thermometers with maximum device and applies only to thermometers filled with metallic liquid.</p>	<p><b>Scope:</b> This part of the standard specifies performance requirements and test methods for clinical liquid-in-glass thermometers with maximum device and applies only to thermometers filled with metallic liquid.</p>
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ICS 17.200.20

Võtmesõnad:

**English version**

**Clinical thermometers**

**Part 1: Metallic liquid-in-glass thermometers with maximum device**

Thermomètres médicaux – Partie 1:  
Thermomètres à dilatation de liquide  
métallique dans une gaine de verre,  
avec dispositif à maximum

Medizinische Thermometer – Teil 1:  
Mit metallischer Flüssigkeit gefüllte  
Glasthermometer mit Maximumvor-  
richtung

This European Standard was approved by CEN on 1999-05-13.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 205 "Non-active medical devices", the secretariat of which is held by BSI.

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

This European Standard 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 standard.

For A-deviations, see annex ZB.

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 applies to clinical thermometers which are used for measuring the body temperature of humans.

EN 12470 consists of the following Parts under the general title 'Clinical thermometers':

Part 1: Metallic liquid-in-glass thermometers with maximum device

Part 2: Phase change-type (dot matrix) thermometers

Part 3: Performance of compact electrical thermometers (non-predictive and predictive) with maximum device

Part 4: Performance of electrical thermometers for continuous measurements

Part 5: Performance of infra-red ear thermometers (with maximum device)

Annexes A, B, C, ZA and ZB are informative.

## 1 Scope

This Part of EN 12470 specifies performance requirements and test methods for clinical liquid-in-glass thermometers with maximum device and applies only to thermometers filled with metallic liquid.

NOTE 1: Note that in some European countries the use of mercury is prohibited in clinical thermometers.

NOTE 2: Substances other than metallic liquids can be used in the manufacturing of liquid-in-glass thermometers. No reference is made to these in this European standard because there is no experience of clinical thermometers which use other substances.

This European Standard does not apply to clinical thermometers designed for special applications (e.g. thermometers for premature babies, ovulation thermometers) which, owing to their measurement range, scale interval or maximum permissible error, fall outside the scope of this standard.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publication. 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 980	<i>Graphical symbols for use in the labelling of medical devices</i>
EN 1041	<i>Information supplied by the manufacturer with medical devices</i>
ISO 719	<i>Glass - Hydrolytic resistance of glass grains at 98 degrees C - Method of test and classification</i>
ISO 2859-2: 1985	<i>Sampling procedures for inspection by attributes - Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection</i>