

**Kaitsekindad ioniseeriva kiirguse ja radioaktiivse saaste eest**

Protective gloves against ionizing radiation and radioactive contamination

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|   |  |
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| Käesolev Eesti standard EVS-EN 421:2010 sisaldb Euroopa standardi EN 421:2010 ingliskeelset teksti.<br><br>Standard on kinnitatud Eesti Standardikeskuse 31.08.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.<br><br>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 26.05.2010.<br><br>Standard on kätesaadav Eesti standardiorganisatsionist. | This Estonian standard EVS-EN 421:2010 consists of the English text of the European standard EN 421:2010.<br><br>This standard is ratified with the order of Estonian Centre for Standardisation dated 31.08.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.<br><br>Date of Availability of the European standard text 26.05.2010.<br><br>The standard is available from Estonian standardisation organisation. |
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**ICS 13.280, 13.340.40**

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EUROPEAN STANDARD  
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EN 421

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ICS 13.280; 13.340.40

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English Version

Protective gloves against ionizing radiation and radioactive  
contamination

Gants de protection contre les rayonnements ionisants et la  
contamination radioactive

Schutzhandschuhe gegen ionisierende Strahlung und  
radioaktive Kontamination

This European Standard was approved by CEN on 22 April 2010.

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## Foreword

This document (EN 421:2010) has been prepared by Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets", 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of an identical text or by endorsement, at the latest by November 2010, and conflicting national standards shall be withdrawn at the latest by November 2010.

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 421:1994.

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.

Annex D provides details of significant technical changes between this European Standard and the previous edition EN 421:1994.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies requirements and test methods for gloves to protect against ionizing radiation and radioactive contamination. The standard is applicable to gloves offering protection to the hand and various parts of the arm and shoulder. It applies also to gloves to be mounted in permanent containment enclosures.

This European Standard also applies to intermediary sleeves used between a glove and a permanent containment enclosure (report to 4.7.2.3).

The requirements of this European Standard do not apply to protective gloves against X-ray radiation.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 374-1:2003, *Protective gloves against chemicals and micro-organisms — Part 1: Terminology and performance requirements*

EN 374-3, *Protective gloves against chemicals and micro-organisms — Part 3: Determination of resistance to permeation by chemicals*

EN 388:2003, *Protective gloves against mechanical risks*

EN 420:2003+A1:2009, *Protective gloves — General requirements and test methods*

EN 61331-1:2002, *Protective devices against diagnostic medical X-radiation — Part 1: Determination of attenuation properties of materials (IEC 61331-1:1994)*

ISO 1431-1, *Rubber, vulcanised or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

ISO 7000:2004, *Graphical symbols for use on equipment — Index and synopsis*

ISO 11933-1, *Components for containment enclosures — Part 1: Glove/bag ports, bungs for glove/bag ports, enclosure rings and interchangeable units*

ISO 11933-2, *Components for containment enclosures — Part 2: Gloves, welded bags, gaiters for remote - handling tongs and for manipulators*

CEN ISO/TR 11610:2004, *Protective clothing — Vocabulary (ISO/TR 11610:2004)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN ISO/TR 11610:2004 and the following apply.

### 3.1

#### **radioactive contamination**

presence of radioactive substances in or on a material or in a place where they are undesirable or could be harmful