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Irish Standard  
I.S. EN 421:2010

# Protective gloves against ionizing radiation and radioactive contamination

## I.S. EN 421:2010

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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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of an identical text or by endorsement, at the latest by November 2010, and conflicting national standards shall be withdrawn at the latest by November 2010.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

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