



NSAI
Standards

Irish Standard
I.S. EN 1073-1:2016

Protective clothing against solid airborne particles including radioactive contamination
- Part 1: Requirements and test methods for compressed air line ventilated protective clothing, protecting the body and the respiratory tract

I.S. EN 1073-1:2016

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National Foreword

I.S. EN 1073-1:2016 is the adopted Irish version of the European Document EN 1073-1:2016, Protective clothing against solid airborne particles including radioactive contamination - Part 1: Requirements and test methods for compressed air line ventilated protective clothing, protecting the body and the respiratory tract

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EUROPEAN STANDARD

EN 1073-1

NORME EUROPÉENNE

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Supersedes EN 1073-1:1998

English Version

Protective clothing against solid airborne particles
including radioactive contamination - Part 1:
Requirements and test methods for compressed air line
ventilated protective clothing, protecting the body and the
respiratory tract

Vêtements de protection contre les particules solides
en suspension dans l'air, incluant la contamination
radioactive - Partie 1: Exigences et méthodes des
vêtements de protection ventilés par une adduction
d'air comprimé protégeant le corps et le système
respiratoire

Schutzkleidung gegen radioaktive Kontamination - Teil
1: Anforderungen und Prüfverfahren für belüftete
Schutzkleidung gegen radioaktive Kontamination
durch feste Partikel

This European Standard was approved by CEN on 27 November 2015.

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This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 1073-1:2016 (E)**European foreword**

This document (EN 1073-1:2016) 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 August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

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 1073-1:1998.

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.

EN 1073 is currently composed with the following parts:

- EN 1073-1, *Protective clothing against solid airborne particles including radioactive contamination — Part 1: Requirements and test methods for compressed air line ventilated protective clothing, protecting the body and the respiratory tract;*
- EN 1073-2, *Protective clothing against radioactive contamination — Part 2: Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination.*

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.

1 Scope

This European Standard specifies the requirements and test methods for protective clothing, ventilated by an independent supply of air from an uncontaminated source, protecting the body and the respiratory system of the wearer against solid airborne particles including radioactive contamination. This kind of protective clothing can be provided with an emergency breathing facility.

This European Standard does not apply for the protection against ionizing radiation and the protection of patients against contamination with radioactive substances by diagnostic and/or therapeutic measures.

If additional protection against chemicals is required, reference should be made to the relevant standard and/or CEN/TR 15419.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 132, *Respiratory protective devices — Definitions of terms and pictograms*

EN 134, *Respiratory protective devices — Nomenclature of components*

EN 136:1998, *Respiratory protective devices — Full face masks — Requirements, testing, marking*

EN 12021, *Respiratory equipment — Compressed gases for breathing apparatus*

EN 12941:1998, *Respiratory protective devices — Powered filtering devices incorporating a helmet or a hood — Requirements, testing, marking*

EN 13274-3:2001, *Respiratory protective devices — Methods of test — Part 3: Determination of breathing resistance*

EN 13274-4, *Respiratory protective devices — Methods of test — Part 4: Flame tests*

EN 13274-6, *Respiratory protective devices — Methods of test — Part 6: Determination of carbon dioxide content of the inhalation air*

EN 14325, *Protective clothing against chemicals — Test methods and performance classification of chemical protective clothing materials, seams, joins and assemblages*

EN 14594, *Respiratory protective devices — Continuous flow compressed air line breathing apparatus - Requirements, testing, marking*

EN 14605:2005+A1:2009, *Protective clothing against liquid chemicals — performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4])*

EN ISO 13688, *Protective clothing — General requirements (ISO 13688)*

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

EN 1073-1:2016 (E)**3 Terms and definitions**

For the purposes of this document, the terms and definitions given in EN 134 and CEN ISO/TR 11610 for protective clothing, and in EN 132 and the following apply.

3.1 protective clothing against solid airborne particles including radioactive contamination
protective clothing intended to provide protection to the skin and if required to the respiratory tract against radioactive contamination and solid airborne particles

3.2 compressed air line ventilated protective clothing
protective clothing which is continuously supplied from a source of compressed breathable air ensuring internal ventilation and overpressure

**3.3 inward leakage in %
IL**
ratio of the concentration of contaminant in the ambient atmosphere to the concentration of the contaminant in the suit. The concentrations taken into account are the average concentrations recorded during a standardized test

**3.4 nominal protection factor (100: inward leakage, IL)
ratio of (100 %) / (inward leakage in %)**
ratio of the concentration of contaminant in the ambient atmosphere to the concentration of the contaminant in the suit

Note 1 to entry: The concentrations taken into account are the average concentrations recorded during a standardized test.

3.5 particulate radioactive contamination
radioactive substances on surfaces or within finely divided solids, where their presence is unintended or undesirable

**3.6 escape device
emergency breathing facility**
system, either integrally combined with the clothing, or intended for simultaneous use with the clothing, providing the wearer with respiratory protection in the event of the failure of the primary air supply to the suit, while he makes his escape from the contaminated environment

3.7 minimum air flow rate
minimum air flow rate with the device operating at the manufacturer's minimum pressure and any user's control valve to the minimum

3.8 maximum air flow rate
maximum air flow rate with the device operating at the manufacturer's maximum pressure and any user's control valve to the maximum

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