



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 943-1:2015+A1:2019

Protective clothing against dangerous solid, liquid and gaseous chemicals, including liquid and solid aerosols - Part 1: Performance requirements for

Vêtements de protection contre les
produits chimiques dangereux solides,
liquides et gazeux, y compris les aérosols
liquides et les particules solides - Partie

Schutzkleidung gegen gefährliche feste,
flüssige und gasförmige Chemikalien,
einschließlich Flüssigkeitsaerosole und
feste Partikel - Teil 1:

03/2019



National Foreword

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English Version

Protective clothing against dangerous solid, liquid and gaseous chemicals, including liquid and solid aerosols - Part 1: Performance requirements for Type 1 (gas-tight) chemical protective suits

Vêtements de protection contre les produits chimiques dangereux solides, liquides et gazeux, y compris les aérosols liquides et les particules solides - Partie 1: Exigences de performance des combinaisons de protection chimique étanches aux gaz (type 1)

Schutzkleidung gegen gefährliche feste, flüssige und gasförmige Chemikalien, einschließlich Flüssigkeitsaerosole und feste Partikel - Teil 1: Leistungsanforderungen für Typ 1 (gasdichte) Chemikalienschutzkleidung

This European Standard was approved by CEN on 27 June 2015 and includes Amendment A1 approved by CEN on 24 October 2018.

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
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Contents

Page

European foreword.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Performance requirements	9
4.1 General	9
4.2 Materials	9
4.3 Seams, joins, and assemblages	12
4.4 Strength of detachable joins	13
4.5 Permeation requirement for closure	14
4.6 Gloves	14
5 Requirements for the whole suit	14
5.1 General	14
5.2 Compatibility with other equipment	16
5.3 A_1 Simulation of extreme storage conditions A_1	16
5.4 Leak tightness (static inflation test)	16
5.5 Total inward leakage test	16
5.6 Visor	17
5.6.1 General	17
5.6.2 Distortion of vision	17
5.6.3 Distortion of vision after chemical exposure	17
5.6.4 Field of vision	18
5.6.5 Mechanical strength	18
5.7 Face piece for suits without integral visor	18
5.8 Pass-through	19
5.8.1 General	19
5.8.2 Strength of pass-through	19
5.8.3 Performance of pass-through providing breathing air	19
5.9 Airline supply system	19
5.9.1 General	19
5.9.2 Couplings	19
5.9.3 Connections	19
5.9.4 Connections strength	19
5.10 Exhaust assembly	20
5.11 Pressure in chemical protective suit	20
5.12 External ventilating hose	20
5.13 Air flow rate of breathing air and/or ventilating air supply	20
5.13.1 General	20
5.13.2 Continuous flow valve for Type 1c breathing air supply	20
5.13.3 Warning and measuring facilities	21
5.13.4 Compressed air supply tube	21
5.14 Carbon dioxide content of inhalation air	21
5.15 Noise associated with air supply to suit	21
5.16 Practical Performance	21
6 Test methods	22
6.1 Visual inspection	22
6.2 Practical performance test	22

6.2.1	General	22
6.2.2	Work simulation test.....	23
6.2.3	Information to be recorded	24
6.3	Suit pressure test.....	24
6.4	Pull test for joins and assemblages	24
6.5	Exhalation valves.....	25
6.5.1	Leak tightness test.....	25
6.5.2	Connection between exhalation valve (exhaust assembly) and chemical protective clothing material.....	25
6.6	Mechanical strength test for visor.....	26
6.7	Distortion of vision after chemical exposure	26
7	Marking	26
8	Information supplied by the manufacturer	27
Annex A (normative)	Total inward leakage test.....	30
A.1	Principle.....	30
A.2	Test subjects.....	30
A.3	Sodium chloride method.....	30
A.3.1	Aerosol generator.....	30
A.3.2	Test agent	30
A.3.3	Detection.....	31
A.3.4	Flame photometer	31
A.3.5	Sample pump.....	31
A.3.6	Sampling of chamber concentration.....	31
A.4	Sulphur hexafluoride method (SF6)	32
A.4.1	Test agent	32
A.4.2	Detection.....	33
A.5	Sampling probe	34
A.6	Test chamber.....	34
A.7	Treadmill	34
A.8	Test procedure	34
A.8.1	Test subject.....	34
A.8.2	Test protocol	34
A.8.3	Assessment of results.....	34
Annex B (normative)	Material tests	36
B.1	General	36
B.2	Material tests - Resistance to ignition	36
Annex C (normative)	Ⓐ Distortion of vision Ⓐ	37
Annex D (informative)	Adapted test cell for testing closures (zipper)	38
Annex E (informative)	Significant technical changes between this document and the previous edition of this European Standard.....	39

Annex ZA (informative)  Relationship between this European Standard and the essential requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment aimed to be covered 	41
Bibliography	43

European foreword

This document (EN 943-1:2015+A1:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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

This document includes Amendment 1 approved by CEN on 2018-10-24.

This document supersedes A1 EN 943-1:2015 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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.

For details of the significant changes made since EN 943-1:2002 please refer to Annex E.

EN 943 consists of the following parts:

EN 943-1, *Protective clothing against solid, liquid and gaseous chemicals, including liquid and solid aerosols — Part 1: Performance requirements for Type 1 (gas-tight) chemical protective suits*

EN 943-2, *Protective clothing against solid, liquid and gaseous chemicals, including aerosols — Part 2: Performance requirements for Type 1 gas-tight chemical protective suits for emergency teams (ET)*

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

1 Scope

This European Standard specifies the minimum requirements, test methods, marking and information supplied by the manufacturer for ventilated and non-ventilated gas-tight chemical protective suits.

It specifies full body personal protective ensembles to be worn for protection against solid, liquid and gaseous chemicals, including liquid and solid aerosols.

A1 This standard does not establish minimum criteria for protection for non-chemical hazards, e.g. radiological, fire, heat, explosive hazards, infective agents. **A1** This type of equipment is not intended for total immersion in liquids.

A1 The seams, joins and assemblages attaching the accessories are included within the scope of this standard. The basic performance criteria for the components such as gloves, boots or respiratory protective equipment are given in other Standards, supplementary requirements are provided in this standard. **A1**

Particulate protection is limited to physical penetration of the particulates only.

A1 Chemicals such as violently air sensitive reagents, unstable explosives and cryogenic liquids have not been considered since protection against these additional hazards is beyond the scope of this standard. **A1**

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

EN 388, *Protective gloves against mechanical risks*

A1 EN 1073-1:2016+A1:2018, *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* **A1**

EN 1073-2, *Protective clothing against radioactive contamination — Part 2: Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination*

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

EN 13274-4:2001, *Respiratory protective devices — Methods of test — Part 4: Flame tests*

EN 14593-1:2005, *Respiratory protective devices — Compressed air line breathing apparatus with demand valve — Part 1: Apparatus with a full face mask — Requirements, testing, marking*

EN 14594:2005, *Respiratory protective devices — Continuous flow compressed air line breathing apparatus — Requirements, testing, marking*

A1 EN 14325:2018 **A1**, *Protective clothing against chemicals — Test methods and performance classification of chemical protective clothing materials, seams, joins and assemblages*

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