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**EN 943-1**

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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.

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## European foreword

This document (EN 943-1:2015) 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of an identical text or by endorsement, at the latest by February 2016, and conflicting national standards shall be withdrawn at the latest by February 2016.

This document supersedes EN 943-1:2002.

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)*

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.

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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 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.

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

The seams, joins and assemblages attaching the accessories are included within the scope of this standard. This standard specifies only supplementary requirements for components. The basic performance criteria for the components gloves, boots or respiratory protective equipment are given in other European Standards.

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

## 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*

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*

EN 14325:2004, *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)*

EN ISO 13688:2013, *Protective clothing - General requirements (ISO 13688:2013)*

EN ISO 13982-2, *Protective clothing for use against solid particulates - Part 2: Test method of determination of inward leakage of aerosols of fine particles into suits (ISO 13982-2:2004)*

EN ISO 17491-3, *Protective clothing - Test methods for clothing providing protection against chemicals - Part 3: Determination of resistance to penetration by a jet of liquid (jet test) (ISO 17491-3:2008)*

EN ISO 20345:2011, *Personal protective equipment - Safety footwear (ISO 20345:2011)*

ISO 17491-1:2012, *Protective clothing — Test methods for clothing providing protection against chemicals — Part 1: Determination of resistance to outward leakage of gases (internal pressure test)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**