

---

---

**Protective clothing for use against solid  
particulates —**

Part 1:

**Performance requirements for chemical  
protective clothing providing protection  
to the full body against airborne solid  
particulates (type 5 clothing)**

*Vêtements de protection à utiliser contre les particules solide —*

*Partie 1: Exigences de performance des vêtements de protection contre  
les produits chimiques offrant une protection au corps entier contre les  
particules solides transportées par l'air (vêtements de type 5)*



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

Page

Foreword .....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Performance requirements .....	2
5 Marking .....	4
6 Information supplied by the manufacturer .....	5
Bibliography .....	7

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 13982-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets*, in collaboration with Technical Committee ISO/TC 94, *Personal safety*, *Protective clothing and equipment*, Subcommittee SC 13, *Protective clothing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 13982 consists of the following parts, under the general title *Protective clothing for use against solid particulates*:

- *Part 1: Performance requirements for chemical protective clothing providing protection to the full body against airborne solid particulates (type 5 clothing)*
- *Part 2: Test method of determination of inward leakage of aerosols of fine particles into suits*

## Introduction

It is necessary to determine the suitability of type 5 clothing for each specific chemical substance and its acceptable exposure limits in relation to the inward leakage of the type 5 garment. Hence, it is possible, that this type of clothing does not offer adequate protection from aerosols of highly hazardous substances, where a type 1 garment might be necessary to obtain the level of protection needed.

This document is a preview generated by EVS

This document is a preview generated by EVS

# Protective clothing for use against solid particulates —

## Part 1:

## Performance requirements for chemical protective clothing providing protection to the full body against airborne solid particulates (type 5 clothing)

### 1 Scope

This part of ISO 13982 specifies the minimum requirements for chemical protective clothing resistant to penetration by airborne solid particles (type 5). These garments are full-body protective clothing, i.e. covering trunk, arms and legs, such as one-piece coveralls or two piece suits, with or without hood or visors, with or without foot protection. Requirements for component parts, such as hoods, gloves, boots, visors or respiratory protective equipment might be specified in other International and European Standards.

This part of ISO 13982 is applicable only to airborne solid particulates. It is not applicable to other forms of challenge by solid chemicals, e.g. penetration of chemical dust through materials by rubbing or flexing, which may form the object of separate standards.

### 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.

ISO 3758, *Textiles — Care labelling code using symbols*

ISO/TR 11610, *Protective clothing — Vocabulary*

ISO 13982-2:—<sup>1)</sup>, *Protective clothing for use against solid particulates — Part 2: Test method for determination of inward leakage of aerosols of fine particles into suits*

EN 340:2003, *Protective clothing — General requirements*

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

EN 14325:2004, *Protective clothing against chemicals — Test methods and performance classification of chemical protective clothing materials, seams, joins and assemblages*

### 3 Terms and definitions

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

1) To be published.