INTERNATIONAL STANDARD

ISO 16900-3

First edition 2012-11-01

Respiratory protective devices — Methods of test and test equipment —

Part 3:

Determination of particle filter penetration

Appareils de protection respiratoire — Méthodes d'essai et équipement d'essai —

Partie 3: Détermination de la pénétration d'un filtre à particules

Document Preview

ISO 16900-3:2012

https://standards.iteh.ai/catalog/standards/iso/ab2b2b1f-1d5f-4b02-9b52-00ef79e79de8/iso-16900-3-2012



iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 16900-3:2012

https://standards.iteh.ai/catalog/standards/iso/ab2b2b1f-1d5f-4b02-9b52-00ef79e79de8/iso-16900-3-2012



COPYRIGHT PROTECTED DOCUMENT

© ISO 2012

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 Web www.iso.org

Published in Switzerland

| | , | Page |
|------------------|---|-------------|
| | word | |
| Intro | oduction | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Prerequisites | 1 |
| 5 | General test requirements | 1 |
| 6 | Principle | 1 |
| 7 | Apparatus 7.1 General 7.2 Aerosol generator 7.3 Flow control module 7.4 Filter test chamber 7.5 Aerosol detector | |
| 8 | Methods 8.1 General 8.2 Short-term particle penetration test 8.3 Full exposure particle penetration test 8.4 Storage after exposure test 8.5 Calculation of percent penetration | 5 5 6 |
| 9 | 8.5 Calculation of percent penetration | 7 |
| 10 | Uncertainty of measurement Ment Preview | 7 |
| Anne | ex A (normative) Application of uncertainty of measurement | 8 |
| Bibli s://sta | ography <u>ISO 16900-3:2012</u> ndards.iteh.ai/catalog/standards/iso/ab2b2b1f-1d5f-4b02-9b52-00ef79e79de8/iso- | |

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 16900-3 was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 15, *Respiratory protective devices*.

ISO 16900 consists of the following parts, under the general title *Respiratory protective devices* — *Methods of test and test equipment*:

- Part 1: Determination of inward leakage
- Part 2: Determination of breathing resistance
- Part 3: Determination of particle filter penetration 1 Preview
- Part 4: Determination of gas filter capacity and migration, desorption and carbon monoxide dynamic testing

The following parts are under preparation:

- Part 5: Breathing machine/metabolic simulator/RPD headforms/torso, tools and transfer standards
- Part 8: Measurement of RPD air flow rates
- Part 10: Resistance to ignition, flame, radiant heat and heat
- Part 12: Determination of volume averaged work of breathing and peak respiratory pressures

Introduction

This part of ISO 16900 is intended as a supplement to the respiratory protective devices (RPD) performance standard ISO 17420 (all parts). Test methods are specified for complete devices or parts of devices that are intended to comply with ISO 17420. If deviations from the test method given in this part of ISO 16900 are necessary, these deviations will be specified in ISO 17420.

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 16900-3:2012

https://standards.iteh.ai/catalog/standards/iso/ah2b1f-1d5f-4b02-9h52-00ef79e79de8/iso-16900-3-2012

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 16900-3:2012

https://standards.iteh.ai/catalog/standards/iso/ab2b2b1f-1d5f-4b02-9b52-00ef79e79de8/iso-16900-3-2012