



BSI Standards Publication

Respiratory protective devices - Methods of test

Part 7: Determination of particle filter penetration

This is a preview of "BS EN 13274-7:2019". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 13274-7:2019. It supersedes BS EN 13274-7:2008, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/4, Respiratory protection.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Respiratory protective devices - Methods of test - Part 7: Determination of particle filter penetration

Appareils de protection respiratoire -
Méthodes d'essai - Partie 7: Détermination
de la pénétration des filtres à particules

Atemschutzgeräte - Prüfverfahren - Teil 7:
Bestimmung des Durchlasses von Partikelfiltern

This European Standard was approved by CEN on 5 May 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 13274-7:2019) has been prepared by Technical Committee CEN/TC 79 "Respiratory protection devices", 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text or by endorsement, at the latest by month year of December 2019, and conflicting national standards shall be withdrawn at the latest by month year of December 2019.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 supersedes EN 13274-7:2008.

The following main technical changes have been made compared to EN 13274-7:2008:

- a) reference to EN 13274-5 in storage test (5.5) deleted;
- b) test equipment for sodium chloride test and test conditions clarified and summarized in one subclause;
- c) procedure for sodium chloride test revised;
- d) calculation of the penetration for sodium chloride revised;
- e) test equipment for paraffin oil test and test conditions clarified and summarized in one subclause;
- f) procedure for paraffin oil test revised;
- g) figures adapted to the changes made in the test procedures, where appropriate.

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Introduction

This document is intended as a supplement to the specific device standards for respiratory protective devices. Test methods are specified for complete or parts of devices. If deviations from the test method given in this document are necessary, these deviations will be specified in the relevant device standard.

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1 Scope

This document specifies the procedure for testing particle filter penetration for respiratory protective devices.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 132 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Pre-requisites

In order to implement this document, at least the following parameters need to be specified in the appropriate device standard:

- items to be tested;
- number of samples;
- test method(s);
- flow rate through the filter;
- sequence of conditioning phases, where more than one is required;
- specification of any observations to be carried out;
- sample preparation and orientation;
- sample holding;
- in the case of the exposure test, the specified mass of test aerosol;
- pass/fail criteria;
- any deviations from this method.

5 Test requirements

5.1 General

Two test aerosols are used for measurement of filter penetration:

- a) Sodium Chloride, using the equipment specified in [Clause 6](#);
- b) Paraffin Oil, using the equipment specified in [Clause 7](#).