

### SLOVENSKI STANDARD SIST EN ISO 15957:2015

01-maj-2015

### Preskusni prahovi za ocenjevanje opreme za čiščenje zraka (ISO 15957:2015)

Test dusts for evaluating air cleaning equipment (ISO 15957:2015)

Aufgabestäube zum Prüfen von Luftfilteranlagen (ISO 15957:2015)

Poussières d'essai pour l'évaluation des équipements d'épuration d'air (ISO 15957:2015)

Ta slovenski standard je istoveten z: EN ISO 15957:2015

SIST EN ISO 15957:2015

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ICS:

91.140.30 Prezračevalni in klimatski

Ventilation and air-

sistemi

conditioning

SIST EN ISO 15957:2015

en

**SIST EN ISO 15957:2015** 

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EUROPEAN STANDARD NORME EUROPÉENNE **EN ISO 15957** 

EUROPÄISCHE NORM

March 2015

ICS 91.140.30

#### **English Version**

### Test dusts for evaluating air cleaning equipment (ISO 15957:2015)

Poussières d'essai pour l'évaluation des équipements d'épuration d'air (ISO 15957:2015)

Aufgabestäube zum Prüfen von Luftfilteranlagen (ISO 15957:2015)

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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

### EN ISO 15957:2015 (E)

Contents	Page
Foreword	

# iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 15957:2015 (E)

#### **Foreword**

This document (EN ISO 15957:2015) has been prepared by Technical Committee ISO/TC 142 "Cleaning equipment for air and other gases" in collaboration with Technical Committee CEN/TC 195 "Air filters for general air cleaning" the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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#### **Endorsement notice**

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# INTERNATIONAL STANDARD

ISO 15957

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### Test dusts for evaluating air cleaning equipment

Poussières d'essai pour l'évaluation des équipements d'épuration d'air

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Coı	ntents	Page
Fore	eword	iv
Intro	oduction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	
4	Test dusts designation	2
5	Chemical composition	
6	Particle size distribution	
7	Particle size analysis procedure 7.1 L1 test dust 7.2 L2 test dust 7.3 L3 test dust 7.4 L4 test dust	3 3
8	Production methods 8.1 L1 test dust 8.2 L2 test dust 8.3 L3 test dust 8.4 L4 test dust STANDARD PREVIEW	3 3
9	Properties 9.1 L1 test dust 9.2 L2 test dust 9.3 L3 test dust 9.4 L4 test dust SIST EN ISO 15957:2015 9.4 L4 test dust SIST EN ISO 15957:2015	4 4
10	362f54c3cf05/sist-en-iso-15957-2015  Application  10.1 General  10.2 L1 test dust  10.3 L2 test dust  10.4 L3 test dust  10.5 L4 test dust	4 4 4
11	Related standards 11.1 L1 test dust 11.2 L2 test dust 11.3 L3 test dust 11.4 L4 test dust	5 5 5
12	Requirements for load test dust distribution	5
Ann	ex A (normative) Material safety	6
	ex B (informative) Literature review of mass size distribution of atmospheric	
	aerosol particles	
	ex C (informative) Comparison of particle size distributions	
Ribli	iography	0

ISO 15957:2015(E)

### **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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 142, Cleaning equipment for air and other gases.

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### Introduction

Filters are subjected to evaluation of their initial performance and dust-loaded performance in laboratory tests using specified test dusts. The results are to reflect the performance of the filter as installed in a building. However, since the properties of atmospheric aerosols vary to a large extent regionally, seasonally, and according to weather conditions, test data obtained with a given test dust seldom accurately predict the filter performance as actually used. In addition to this, the test results with a given test dust might not be in agreement with those obtained by other laboratories because the filter performance is affected by many factors such as particle size distribution, particle agglomeration, and electrical charge. Despite these problems in testing filter performance, the test data are used for the classification of filters, estimation of energy consumption, Life Cycle Cost (LCC), and Life Cycle Assessment (LCA).

The test dust used for evaluating initial performance and loaded performance of filters can have a different specification from the dust used to achieve filter loading.

This International Standard does not control the specification, manufacturing, or use of test dusts. It describes the properties of test dusts which can be used to load filters, and the requirements for test dust generation that will ensure that useful laboratory test results are obtained in order to mimic the actual use as much as possible.

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