



**SLOVENSKI STANDARD**  
**SIST EN 16523-2:2015/oprA1:2017**  
**01-september-2017**

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**Ugotavljanje odpornosti materiala proti pronicanju kemikalij - 2. del: Pronicanje potencialno nevarnih plinastih kemikalij pri pogojih neprestanega stika**

Determination of material resistance to permeation by chemicals - Part 2: Permeation by potentially hazardous gaseous chemicals under conditions of continuous contact

Bestimmung des Widerstands von Schutzmaterial gegen Permeation mit flüssigen Chemikalien - Teil 2: Permeation von potentiell gefährlichen gasförmigen Chemikalien bei kontinuierlichem Kontakt

Détermination de la résistance des matériaux à la perméation par les produits chimiques - Partie 2 : Perméation les produits chimiques gazeux potentiellement dangereux en condition de contact continue

**Ta slovenski standard je istoveten z: EN 16523-2:2015/prA1**

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**ICS:**

13.340.01	Varovalna oprema na splošno	Protective equipment in general
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<b>SIST EN 16523-2:2015/oprA1:2017</b>	<b>en,fr,de</b>
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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**EN 16523-2:2015**  
**prA1**

June 2017

ICS 13.340.01

English Version

## Determination of material resistance to permeation by chemicals - Part 2: Permeation by potentially hazardous gaseous chemicals under conditions of continuous contact

Détermination de la résistance des matériaux à la perméation par les produits chimiques - Partie 2 : Perméation les produits chimiques gazeux potentiellement dangereux en condition de contact continue

Bestimmung des Widerstands von Schutzmaterial gegen Permeation mit flüssigen Chemikalien - Teil 2: Permeation von potentiell gefährlichen gasförmigen Chemikalien bei kontinuierlichem Kontakt

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 162.

This draft amendment A1, if approved, will modify the European Standard EN 16523-2:2015. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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 16523-2:2015/prA1:2017) 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 document is currently submitted to the CEN Enquiry.

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 89/686/EEC and Regulation (EU) 2016/425.

For relationship with EU Directive and EU Regulation, see informative Annexes ZA and ZB, which are integral parts of this document.

**EN 16523-2:2015/prA1:2017 (E)****1 Modification to the Title**

Change the Titles of the standard as follows:

“Determination of material resistance to permeation by chemicals — Part 2: Permeation by potentially hazardous gaseous chemicals under conditions of continuous contact

Bestimmung des Widerstands von Schutzmaterial gegen Permeation mit flüssigen Chemikalien — Teil 2: Permeation von potentiell gefährlichen gasförmigen Chemikalien bei kontinuierlichem Kontakt

Détermination de la résistance des matériaux à la perméation par les produits chimiques — Partie 2: Perméation les produits chimiques gazeux potentiellement dangereux en condition de contact continue”

**2 Modification to the Introduction**

*Delete the first sentence:*

“This European Standard is used in conjunction with EN 16523-1.”

**3 Modification to Clause 1 “Scope”**

*Replace the existing 3rd paragraph by the following:*

“This test method is not applicable for the assessment of gaseous chemical mixtures.”

**4 Modification to Clause 4 “Test principle”**

*Add the following paragraph as new 2nd paragraph:*

“This standard shall be read in conjunction with EN 16523-1.”

**5 Modification to 6.1 “General”**

*Replace the existing sentence by the following sentence:*

“See EN 16523-1:2015, Clause 6, except for the compartment for challenge chemical.”

**6 Modification to 6.2 “Sampling compartment of the challenge chemical”**

*Delete in the first sentence, in the key to Figure 1 and in the title of Figure 1 the word “Sampling”.*

**7 Modification to 8.3 “Test procedure”**

*Replace the first paragraph by the following paragraph:*

“The test temperature shall be  $(23 \pm 1)$  °C. The challenge gaseous chemical entering in the permeation cell, the collecting medium and the permeation cell shall be at  $(23 \pm 1)$  °C.”

*Replace the first two paragraphs after item b) by the following:*

“The concentration of the challenge chemical test in the collecting medium shall be measured periodically or continuously.

For non-continuous measurement, the number of measurement shall be sufficient to define the breakthrough time. The frequency of analysis of the collecting medium immediately before the time at which the NPR is measured shall be as listed in Table 1.”

*Align in the first paragraph after NOTE 2 the cross-references to EN 16523-1:2015:*

“The NBT is deemed to have occurred when the permeation rates of the challenge chemical reaches the NPR; see EN 16523 1:2015, 8.4.1 and 8.4.2.”

*Replace “registered” by “recorded” in the third paragraph after NOTE 2:*

“The 3 test specimens shall be tested. Each visual change (with the naked eye optical devices,...) in the test specimen after the test shall be recorded (see EN 16523 1:2015, Annex B).”

*Add the following two new paragraphs at the end of 8.3:*

“Unless otherwise specified, the nominal test duration shall be 8H.

If any problem happens during the test (for example a leak), the laboratory shall start the test again with another new test specimen.”

## **8 Modification to Annex ZA**

*Replace the existing Annex ZA by the following two Annexes ZA and ZB:*

## Annex ZA (informative)

### Relationship between this European Standard and the essential requirements of Directive 89/686/EEC aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/031 to provide one voluntary means of conforming to Essential requirements of Directive 89/686/EEC on the approximation of the laws of the Member States relating to personal protective equipment.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Annex II of Directive 89/686/EEC**

Essential Requirements of Directive 89/686/EEC	Clause(s)/subclause(s) of this EN	Remarks/Notes
3.10.2. Protection against cutaneous and ocular contact	Standard	Together with the requirements in te product standard

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.