



**SLOVENSKI STANDARD**  
**SIST EN ISO 17226-3:2011**

**01-november-2011**

---

**Usnje - Kemijsko določevanje formaldehida - 3. del: Določevanje izločenega formaldehida iz usnja (ISO 17226-3:2011)**

Leather - Chemical determination of formaldehyde content - Part 3: Determination of formaldehyde emissions from leather (ISO 17226-3:2011)

Leder - Chemische Bestimmung des Formaldehydgehalts - Teil 3: Bestimmung der Formaldehydemissionen aus Leder (ISO 17226-3:2011)

Cuir - Dosage chimique du formaldéhyde - Partie 3: Dosage des émissions de formaldéhyde du cuir (ISO 17226-3:2011)

<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>

**Ta slovenski standard je istoveten z: EN ISO 17226-3:2011**

---

**ICS:**

59.140.30 Usnje in krzno

Leather and furs

**SIST EN ISO 17226-3:2011**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17226-3:2011](#)

<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>

EUROPEAN STANDARD

EN ISO 17226-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2011

ICS 59.140.30

English Version

## Leather - Chemical determination of formaldehyde content - Part 3: Determination of formaldehyde emissions from leather (ISO 17226-3:2011)

Cuir - Dosage chimique du formaldéhyde - Partie 3: Dosage du formaldéhyde émis par le cuir (ISO 17226-3:2011)

Leder - Chemische Bestimmung des Formaldehydgehalts - Teil 3: Bestimmung der Formaldehydemissionen aus Leder (ISO 17226-3:2011)

This European Standard was approved by CEN on 11 May 2011.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/abc1740-90c9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

[SIST EN ISO 17226-3:2011](https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011)  
<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>

## Foreword

This document (EN ISO 17226-3:2011) has been prepared by Technical Committee CEN/TC 289 "Leather", the secretariat of which is held by UNI, in collaboration with the International Union of Leather Technologists and Chemists Societies.

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 November 2011, and conflicting national standards shall be withdrawn at the latest by November 2011.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17226-3:2011](https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011)

<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17226-3:2011](#)

<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>

INTERNATIONAL  
STANDARD

ISO  
17226-3

IULTCS/IUC  
19-3

First edition  
2011-05-15

---

---

**Leather — Chemical determination of  
formaldehyde content —**

Part 3:

**Determination of formaldehyde emissions  
from leather**

**iTeh STANDARD PREVIEW**  
*Cuir — Dosage chimique du formaldéhyde —*  
*(standards.iteh.ai)* *Partie 3: Dosage du formaldéhyde émis par le cuir*

[SIST EN ISO 17226-3:2011](https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011)

<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>



Reference number  
ISO 17226-3:2011(E)  
IULTCS/IUC 19-3:2011(E)

ISO 17226-3:2011(E)  
IULTCS/IUC 19-3:2011(E)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17226-3:2011](https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011)

<https://standards.iteh.ai/catalog/standards/sist/abef94f0-90e9-4336-9132-8888bc92e486/sist-en-iso-17226-3-2011>



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2011

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
<b>1</b> <b>Scope</b> .....	<b>1</b>
<b>2</b> <b>Normative references</b> .....	<b>1</b>
<b>3</b> <b>Principle</b> .....	<b>1</b>
<b>4</b> <b>Reagents</b> .....	<b>1</b>
4.1 <b>Reagents for the formaldehyde stock solution</b> .....	<b>1</b>
4.2 <b>Reagents for the HPLC method</b> .....	<b>2</b>
<b>5</b> <b>Apparatus</b> .....	<b>2</b>
<b>6</b> <b>Methods</b> .....	<b>2</b>
6.1 <b>Procedure for the determination of formaldehyde in the stock solution</b> .....	<b>2</b>
6.1.1 <b>Preparation of the formaldehyde stock solution</b> .....	<b>2</b>
6.1.2 <b>Determination</b> .....	<b>3</b>
6.2 <b>Procedure for the determination of formaldehyde emission by the HPLC method</b> .....	<b>4</b>
6.2.1 <b>Shipment and storage leather for this method</b> .....	<b>4</b>
6.2.2 <b>Sampling</b> .....	<b>4</b>
6.2.3 <b>Determination of volatile matter</b> .....	<b>4</b>
6.2.4 <b>Determination of formaldehyde emission</b> .....	<b>4</b>
6.2.5 <b>Reaction with DNPH</b> .....	<b>4</b>
6.2.6 <b>HPLC conditions (recommendations)</b> .....	<b>4</b>
6.2.7 <b>Calibration of HPLC</b> .....	<b>5</b>
6.2.8 <b>Calculation of the formaldehyde content in leather samples</b> .....	<b>5</b>
<b>7</b> <b>Expression of results</b> .....	<b>5</b>
<b>8</b> <b>Test report</b> .....	<b>6</b>