

Leather - Chemical tests - Determination of the free formaldehyde in process auxiliaries

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NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 27587:2009 sisaldab Euroopa standardi EN ISO 27587:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 31.12.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.10.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 27587:2009 consists of the English text of the European standard EN ISO 27587:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 15.10.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Leather - Chemical tests - Determination of the free formaldehyde in process auxiliaries (ISO 27587:2009)

Cuir - Essais chimiques - Dosage du formaldéhyde libre dans les auxiliaires de traitement (ISO 27587:2009)

Leder - Chemische Prüfverfahren - Bestimmung des Gehalts an freiem Formaldehyd in Hilfsmitteln für die Lederherstellung (ISO 27587:2009)

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 27587:2009) 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 (IULTCS).

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of an identical text or by endorsement, at the latest by April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

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Leather — Chemical tests — Determination of the free formaldehyde in process auxiliaries

1 Scope

This International Standard specifies a method for the determination of free formaldehyde in process auxiliaries for leather. The analytical result obtained according to this procedure is expressed in milligrams per kilogram (mg/kg) sample. The upper limit of quantification of the method is given by the capacity of the cartridge (total carbonyls 6 400 µg/cartridge).

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

free formaldehyde

formaldehyde that is released under dynamic conditions when the sample is heated in an inert dry atmosphere

4 Principle

The sample is heated in an inert atmosphere for a defined period of time. The released formaldehyde is captured and derivatized using a dinitrophenylhydrazine (DNPH) cartridge. The analyte is eluted with acetonitrile and analysed by high-performance liquid chromatography (HPLC) using a UV detector.

5 Reagents

Use only reagents of recognized analytical grade, unless otherwise stated.

5.1 Sulfuric acid, 3 mol/l.

5.2 Sodium hydroxide, 2 mol/l.

5.3 Sodium thiosulfate, 0,1 mol/l.

5.4 Iodine solution, 0,05 mol/l, i.e. 12,68 g iodine per litre of water.