



NSAI
Standards

Irish Standard
I.S. EN ISO 10195:2021

Leather - Chemical determination of chromium(VI) content in leather - Thermal pre-ageing of leather and determination of hexavalent chromium (ISO 10195:2018)

I.S. EN ISO 10195:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN ISO 10195:2021

Published:

2021-08-11

*This document was published
under the authority of the NSAI
and comes into effect on:*

2021-08-29

ICS number:

59.140.30

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN ISO 10195:2021 is the adopted Irish version of the European Document EN ISO 10195:2021, Leather - Chemical determination of chromium(VI) content in leather - Thermal pre-ageing of leather and determination of hexavalent chromium (ISO 10195:2018)

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

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN ISO 10195

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2021

ICS 59.140.30

English Version

**Leather - Chemical determination of chromium(VI)
content in leather - Thermal pre-ageing of leather and
determination of hexavalent chromium (ISO 10195:2018)**

Cuir - Détermination chimique de la teneur en
chrome(VI) du cuir - Vieillissement thermique du cuir
et détermination de la teneur en chrome hexavalent
(ISO 10195:2018)

Leder - Chemische Bestimmung des Chrom(VI)-Gehalts
in Leder - Thermische Voralterung von Leder und
Bestimmung von sechswertigem Chrom (ISO
10195:2018)

This European Standard was approved by CEN on 9 August 2021.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 10195:2021 (E)

Contents	Page
European foreword.....	3

European foreword

The text of ISO 10195:2018 has been prepared by Technical Committee ISO/IULTCS "International Union of Leather Technologists and Chemists Societies" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10195:2021 by Technical Committee CEN/TC 289 "Leather" 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 February 2022, and conflicting national standards shall be withdrawn at the latest by February 2022.

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.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10195:2018 has been approved by CEN as EN ISO 10195:2021 without any modification.

This page is intentionally left blank

INTERNATIONAL STANDARD

ISO
10195

IULTCS/IUC 41

First edition
2018-05

Leather — Chemical determination of chromium(VI) content in leather — Thermal pre-ageing of leather and determination of hexavalent chromium

*Cuir — Détermination chimique de la teneur en chrome(VI) du cuir
— Vieillissement thermique du cuir et détermination de la teneur en
chrome hexavalent*



Reference numbers
ISO 10195:2018(E)
IULTCS/IUC 41:2018(E)

© ISO 2018

ISO 10195:2018(E)
IULTCS/IUC 41:2018(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Apparatus	1
6 Procedure	2
7 Test report	3
Annex A (informative) Accuracy	4
Annex B (informative) Natural ageing and development of hexavalent chromium	5

ISO 10195:2018(E)
IULTCS/IUC 41:2018(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 www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by the Chemical Test Commission of the International Union of Leather Technologists and Chemists Societies (IUC Commission, IULTCS) in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 289, *Leather*, the secretariat of which is held by UNI, and the European Committee for Standardization (CEN) Technical Committee CEN/TC 309, *Footwear*, the secretariat of which is held by AENOR, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

IULTCS, originally formed in 1897, is a world-wide organization of professional leather societies to further the advancement of leather science and technology. IULTCS has three Commissions, which are responsible for establishing international methods for the sampling and testing of leather. ISO recognizes IULTCS as an international standardizing body for the preparation of test methods for leather.

Introduction

More than 80 % of leather is tanned using chromium(III) salts. The industry recommends manufacturing procedures to avoid oxidative conditions that could allow the formation of traces of hexavalent chromium [chromium(VI)] in the leather.

It is difficult to reproduce the natural ageing process. Therefore, in order to predict the tendency for trace levels of hexavalent chromium to develop in chromium(III) tanned leather, a number of pre-ageing tests have been proposed, some of which are being used in commercial leather specifications.

Following an inter-laboratory trial (see [Annex A](#)), thermal pre-ageing was selected as a suitable pre-ageing test procedure. The method is presented in this document.

Information on the development of hexavalent chromium during the natural ageing of chromium(III) tanned leather is given in [Annex B](#).

Leather — Chemical determination of chromium(VI) content in leather — Thermal pre-ageing of leather and determination of hexavalent chromium

1 Scope

This document specifies a thermal pre-ageing procedure for leather to obtain indications about the tendency to the formation of hexavalent chromium under specified conditions and the determination of hexavalent chromium according to ISO 17075-1 or ISO 17075-2.

This thermal pre-ageing procedure does not simulate any real condition in leather production or use.

It is applicable to all types of chromium tanned leather.

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.

ISO 2418, *Leather — Chemical, physical and mechanical and fastness tests — Sampling location*

ISO 4044:2017, *Leather — Chemical tests — Preparation of chemical test samples*

ISO 17075-1:2017, *Leather — Chemical determination of chromium(VI) content in leather — Part 1: Colorimetric method*

ISO 17075-2:2017, *Leather — Chemical determination of chromium(VI) content in leather — Part 2: Chromatographic method*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

4 Principle

A test specimen of leather is heated in an oven for a specified period of time. The sample is then cooled and the chemical determination of hexavalent chromium [chromium(VI)] is carried out according to ISO 17075-1 or ISO 17075-2.

5 Apparatus

5.1 Static oven, capable of maintaining the required temperature within a tolerance of ± 2 °C. The oven shall not have a fan or any other air circulating system, nor openings that allow active air exchange. The oven should have an interior made of inert materials. An oven with natural convection should be used.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-