

SLOVENSKI STANDARD SIST EN ISO 18254-2:2019

01-april-2019

Tekstilije - Metoda za odkrivanje in določevanje alkilfenoletoksilatov (APEO) - 2. del: Metoda z uporabo NPLC (ISO 18254-2:2018)

Textiles - Method for the detection and determination of alkylphenol ethoxylates (APEO) - Part 2: Method using NPLC (ISO 18254-2:2018)

Textilien - Verfahren zum Nachweis und zur Bestimmung von Alkylphenolethoxylaten (APEO) - Teil 2: Verfahren unter Verwendung von NPLC (ISO 18254-2:2018)

Textiles - Méthode de détection et de détermination des alkylphénols éthoxylés (APEO) - Partie 2: Méthode utilisant la CLPN (ISO 18254-2:2018)

https://standards.iteh.ai/catalog/standards/sist/a8c77c1d-e6dd-4a19-aecc-

Ta slovenski standard je istoveten z: EN ISO 18254-2-2019

ICS:

59.080.01 Tekstilije na splošno Textiles in general

SIST EN ISO 18254-2:2019 en,fr,de

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 18254-2:2019

https://standards.iteh.ai/catalog/standards/sist/a8c77c1d-e6dd-4a19-aecce5055acc0924/sist-en-iso-18254-2-2019

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN ISO 18254-2

February 2019

ICS 59.080.01

English Version

Textiles - Method for the detection and determination of alkylphenol ethoxylates (APEO) - Part 2: Method using NPLC (ISO 18254-2:2018)

Textiles - Méthode de détection et de détermination des alkylphénols éthoxylés (APEO) - Partie 2: Méthode utilisant la CLPN (ISO 18254-2:2018)

Textilien - Verfahren zum Nachweis und zur Bestimmung von Alkylphenolethoxylaten (APEO) - Teil 2: Verfahren unter Verwendung von NPLC (ISO 18254-2:2018)

This European Standard was approved by CEN on 10 December 2018.

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, Croatial Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia) France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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 18254-2:2019 (E)

Contents	Page
European foreword	3

iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 18254-2:2019 (E)

European foreword

This document (EN ISO 18254-2:2019) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products" the secretariat of which is held by BSI.

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 August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

iTeh STANDARD PREVIEW

The text of ISO 18254-2:2018 has been approved by CEN as EN ISO 18254-2:2019 without any modification.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 18254-2:2019

https://standards.iteh.ai/catalog/standards/sist/a8c77c1d-e6dd-4a19-aecce5055acc0924/sist-en-iso-18254-2-2019

INTERNATIONAL STANDARD

ISO 18254-2

First edition 2018-12

Textiles — Method for the detection and determination of alkylphenol ethoxylates (APEO) —

Part 2: **Method using NPLC**

iTeh ST Textiles - Méthode de détection et de détermination des alkylphénols éthoxylés (APEO) — Standard Méthode utilisant la CLPN



iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 18254-2:2019 https://standards.iteh.ai/catalog/standards/sist/a8c77c1d-e6dd-4a19-aecc-e5055acc0924/sist-en-iso-18254-2-2019



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

Cor	ents	Page
Fore	ord	iv
Intro	ıction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	1
5	Reagents	1
6	Apparatus	2
8	Procedure 7.1 Standard preparation 7.2 Mobile phase for HPLC 7.2.1 Methanol with 0,1 % formic acid and 0,01 % ammonium formate 7.2.2 Acetonitrile with 0,1 % formic acid 7.3 Sample preparation 7.4 Sample extraction 7.5 Sample analysis Calculation and calibration 8.1 Calculation of contribution percentage of each APEO congener in standard solution 8.2 Calculation of concentration of each APEO congener in standard solution 8.3 Calculation of concentration of each APEO congener in sample 8.4 Calculation of total concentration of all APEO congener in sample 8.5 Calibration curve SISTEN ISO 18254-22019	3 3 3 3 3 4 4 4 4 4 4 5 5
9	Test report https://standards.iteh.ai/catalog/standards/sist/a8c77c1d-e6dd-4a19-aecc-	5
Anne	e5055acc0924/sist-en-iso-18254-2-2019 A (informative) Examples of chromatographic condition	6
	B (informative) Examples of solid phase extraction (SPE) procedure for clean up	
Anne	C (informative) Results of the interlaboratory test	15
Anne	D (informative) Study of the contribution percentage (mole fraction) of APEO congene	rs16
Bibli	raphy	18

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 of 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 www.iso.org/iso/foreword.html. (Standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 38, Textiles.

A list of all parts in the ISO 18254 series can be found on the ISO websited-4a19-aecc-

e5055acc0924/sist-en-iso-18254-2-2019

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document specifies the normal phase liquid chromatography (NPLC) separation method for the quantitative and qualitative analysis of extractable alkylphenol ethoxylates (APEO) in textile and textile products. NPLC separation method enables alkylphenol ethoxylates to be analysed by high performance liquid chromatograph (HPLC) with Mass Spectrometer (MS), fluorescence detector (FD), charged aerosol detector (CAD) and evaporative light scattering detector (ELSD).

A study of the contribution percentage (mole fraction) of APEO congeners is presented in Annex D.

iTeh STANDARD PREVIEW (standards.iteh.ai)

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 18254-2:2019

https://standards.iteh.ai/catalog/standards/sist/a8c77c1d-e6dd-4a19-aecce5055acc0924/sist-en-iso-18254-2-2019