

Leather - Chemical tests - Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (ISO 17070:2015)

## EESTI STANDARDI EESSÕNA

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ICS 59.140.30

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English Version

## Leather - Chemical tests - Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (ISO 17070:2015)

Cuir - Essais chimiques - Détermination de la teneur en isomères de monochlorophénol, dichlorophénol, trichlorophénol, tétrachlorophénol et en pentachlorophénol (ISO 17070:2015)

Leder - Chemische Prüfungen - Bestimmung des Gehalts an Tetrachlorphenol-, Trichlorphenol-, Dichlorphenol-, Monochlorphenol-Isomeren und Pentachlorphenol (ISO 17070:2015)

This European Standard was approved by CEN on 3 January 2015.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 17070:2015) has been prepared by Technical Committee ISO/TC IULTCS “International Union of Leather Technologists and Chemists Societies” in collaboration with 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of an identical text or by endorsement, at the latest by August 2015, and conflicting national standards shall be withdrawn at the latest by August 2015.

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.

This document supersedes EN ISO 17070:2006.

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### Endorsement notice

The text of ISO 17070:2015 has been approved by CEN as EN ISO 17070:2015 without any modification.

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Abbreviations</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Apparatus</b> .....	<b>2</b>
<b>6 Reagents</b> .....	<b>2</b>
6.1 Chlorinated phenol mix.....	<b>2</b>
<b>7 Sampling and preparation of samples</b> .....	<b>3</b>
<b>8 Procedure</b> .....	<b>3</b>
8.1 Steam-distillation.....	<b>3</b>
8.2 Liquid-liquid-extraction and acetylation.....	<b>4</b>
8.3 Preparation of calibration mixture for acetylated CP and TCG.....	<b>4</b>
8.4 Gas chromatography (GC).....	<b>5</b>
<b>9 Expression of results</b> .....	<b>5</b>
<b>10 Test report</b> .....	<b>5</b>
<b>Annex A (informative) Chromatographic analyses</b> .....	<b>7</b>
<b>Annex B (informative) Reliability of the method</b> .....	<b>9</b>

## Introduction

This International Standard describes a procedure where the chlorinated phenols (CP) are acetylated before the chromatographic detection and the amount of the detected chlorinated phenyl acetate is quantified via an internal standard correction.

# Leather — Chemical tests — Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content

## 1 Scope

This International Standard specifies a method for determining the content of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers, and pentachlorophenol, its salts, and esters in leather.

NOTE Bromophenol isomers can also be determined using this method.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 3696, *Water for analytical laboratory use — Specification and test methods*

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

ISO 4684, *Leather — Chemical tests — Determination of volatile matter*

## 3 Abbreviations

The following abbreviations are used for chlorinated phenols in this International Standard:

CP	chlorinated phenols
DiCP	dichlorophenol
MoCP	monochlorophenol
PCP	pentachlorophenol
TCG	tetrachloroguaiacol (tetrachloro- <i>o</i> -methoxyphenol)
TeCP	tetrachlorophenol
TriCP	trichlorophenol

## 4 Principle

First of all, the leather sample is submitted to steam-distillation.

After extraction into *n*-hexane, the chlorinated phenols (CP) are acetylated by acetic anhydride and the chlorinated phenyl acetates are analysed by gas-chromatography with an electron capture detector (ECD) or mass selective detector (MSD). Quantification is performed by an external standard and a correction made with an internal standard.