# **EESTI STANDARD**

Leather - Chemical determination of N-methyl-2-pyrrolidone (NMP) in leather (ISO 19070:2016)



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

5.		
See Eesti standard EVS-EN ISO 19070:2016 sisaldab Euroopa standardi EN ISO 19070:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 19070:2016 consists of the English text of the European standard EN ISO 19070:2016.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.	
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.04.2016.	Date of Availability of the European standard is 06.04.2016.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.	

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#### ICS 59.140.30

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# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# **EN ISO 19070**

April 2016

ICS 59.140.30

**English Version** 

## Leather - Chemical determination of N-methyl-2pyrrolidone (NMP) in leather (ISO 19070:2016)

Cuir - Détermination de la teneur en N-méthyl-2pyrrolidone (NMP) dans le cuir (ISO 19070:2016) Leder - Chemische Bestimmung von N-methyl-2pyrrolidon (NMP) in Leder (ISO 19070:2016)

This European Standard was approved by CEN on 13 February 2016.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels** 

### **European foreword**

This document (EN ISO 19070:2016) has been prepared by Technical Committee 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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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.

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### **Endorsement notice**

The text of ISO 19070:2016 has been approved by CEN as EN ISO 19070:2016 without any modification.

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## 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.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: <u>Foreword - Supplementary information</u>

ISO 19070 was prepared by the Chemical Testing 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, 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

Under the REACH regulation in the European Union (EU Regulation 1907/2006), N-methyl-2-pyrrolidone has been included in the candidate list of substances of very high concern (SVHC) and its use is restricted.

Accordingly, a new method is given for the determination of *N*-methyl-2-pyrrolidone in leather.

# Leather — Chemical determination of *N*-methyl-2pyrrolidone (NMP) in leather

### 1 Scope

This International Standard specifies a method to determine the amount of *N*-methyl-2-pyrrolidone (NMP) in leather and leather components.

This method may also be used for the determination of *N*-ethyl-2-pyrrolidone (NEP) in leather.

### 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 4044, Leather — Chemical tests — Preparation of chemical test samples

### **3** Principle

The test sample is extracted using acetone at 50 °C in an ultrasonic bath for 1 h. An aliquot is then analysed using a gas chromatograph with a mass selective detector (GC-MS).

### **4** Reagents

All reagents shall be analytical grade.

- **4.1** Acetone, CAS<sup>1</sup>) No. 67-64-1.
- 4.2 *N*-methyl-2-pyrrolidone, at least 99,5 %, CAS No. 872-50-4.

### **5** Apparatus

Usual laboratory equipment and, in particular, the following.

- 5.1 Analytical balance, capable of reading to 0,000 1 g.
- **5.2** Sealable jar, approximately 20 ml, with lid (suitable for carrying out an acetone extraction at 50 °C).
- **5.3** Ultrasonic bath (temperature controlled).
- **5.4 Micro-pipettes**, 50 μl and 100 μl.
- **5.5 Pipettes**, 0,5 ml to 5 ml capacity.
- 5.6 Volumetric flasks, 100 ml.
- 1) CAS = Chemical Abstracts Service