Plastics - Unplasticized cellulose acetate - Determinaton of free acidity

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 1061;2000 sisaldab Euroopa standardi EN ISO 1061:1999 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 1061:2000 consists of the English text of the European standard EN ISO 1061:1999.

Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This International Standard specifies a method for the determination of the amount of free acid in unplasticized cellulose acetate.

Scope:

This International Standard specifies a method for the determination of the amount of free acid in unplasticized

ICS 83.080.01

Võtmesõnad:

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 1061

June 1999

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ICS 83.080.20

English version

Plastics

Unplasticized cellulose acetate

Determination of free acidity (ISO 1061: 1990)

Plastiques - Acétate de cellulose non plastifié – Détermination de l'acidité libre (ISO 1061 : 1990)

Kunststoffe - Weichmacherfreies Celluloseacetat - Bestimmung der freien Säure (ISO 1061: 1990)

This European Standard was approved by CEN on 1999-05-06.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

International Standard

ISO 1061: 1990 Plastics - Unplasticized cellulose acetate - Determination of free acidity,

which was prepared by ISO/TC 61 'Plastics' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 249 'Plastics', the Secretariat of which is held by IBN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by December 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

Standard IS Machine Rolling Control of the Control The text of the International Standard ISO 1061: 1990 was approved by CEN as a European Standard without any modification.

WARNING — The use of this International Standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This International Standard specifies a method for the determination of the amount of free acid in unplasticized cellulose acetate.

The free acidity determined by this method includes acidity extractable by water and acidity due to acidic groups directly attached to the cellulose acetate, e.g. carboxyl groups. The latter is usually a very small proportion of the total.

This method is not suitable for cellulose acetate containing any additives which may affect the test.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 565:1990, Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings.

ISO 585:1990¹⁾, Plastics — Unplasticized cellulose acetate — Determination of moisture content.

3 Principle

A test portion of cellulose acetate is treated with water and the resultant solution titrated with sodium hydroxide solution.

The free acidity is calculated as the percentage, by mass, of free acetic acid in the cellulose acetate.

4 Reagents

During the determination, use only reagents of recognized analytical grade and distilled water as specified in 4.1.

- **4.1 Distilled water**, freshly boiled to remove carbon dioxide and cooled.
- **4.2 Sodium hydroxide**, standard volumetric solution, c(NaOH) = 0.01 mol/l.
- **4.3 Phenolphthalein**, 1 g/l solution in 90 % (V/V) ethanol.

5 Apparatus

- **5.1 Glass flask**, capacity 250 ml or 300 ml, with ground-glass stopper.
- 5.2 Graduated cylinder, capacity 250 ml, graduated at 2 ml intervals.

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¹⁾ To be published.