Plastics - Determination of ash - Part 5: Poly(vinyl chloride)

ash John Ochologico Diffico Diffico Plastics - Determination of ash - Part 5: Poly(vinyl chloride)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 3451-5:2003 sisaldab Euroopa standardi EN ISO 3451-5:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 3451-5:2003 consists of the English text of the European standard EN ISO 3451-5:2002.

This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This part of ISO 3451 specifies three methods for the determination of the ash of poly(vinyl chloride). The general procedures given in ISO 3451-1 are followed.

Scope:

This part of ISO 3451 specifies three methods for the determination of the ash of poly(vinyl chloride). The general procedures given in ISO 3451-1 are followed.

ICS 83.080.20

Võtmesõnad: ash determination, ashes, chemical analysis and testin, chemical analysis and testing, plastics, polyvinyl chloride, testing

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 3451-5

July 2002

ICS 83.080.20

Supersedes EN ISO 3451-5: 1996.

English version

Plastics - Determination of ash

Part 5: Poly(vinyl chloride) (ISO 3451-5: 2002)

Plastiques Détermination du taux de cendres - Partie 5: Poly(chlorure de vinyle) (ISO 3451-5 : 2002)

Kunststoffe - Bestimmung der Asche -Teil 5: Poly(vinylchlorid) (ISO 3451-5: 2002)

This European Standard was approved by CEN on 2002-06-24.

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 Management Centre 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 Management Centre 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, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzeral, land, and the United Kingdom.

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

Management Centre: rue de Stassart 36, B-1050 Brussels

Page 2 EN ISO 3451-5: 2002

Foreword

International Standard

ISO 3451-5: 2002 Plastics - Determination of ash - Part 5: Poly(vinylchlorid),

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 January 2003 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, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

ard ISC pinternationa

On this adoption of the property of the The text of the International Standard ISO 3451-5: 2002 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

WARNING — The use of this part of ISO 3451 may involve hazardous chemicals, materials, operations or equipment. This standard does not purport to address the safety problems associated with its use. It is the responsibility of the user of this standard to establish proper safety and health practices and determine the application of regulatory limitations prior to use.

Poly(vinyl chloride) evolves hydrogen chloride on thermal decomposition and precautions should be taken to avoid inhalation of these or other fumes.

1 Scope

This part of ISO 3451 specifies three methods for the determination of the ash of poly(vinyl chloride). The general procedures given in ISO 3451-1 are followed. For ash, method A is used. For sulfated ash, methods B and C are used. All three methods are applicable to resins, compounds and finished products. Methods B and C are applicable when lead-containing compounds are present.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 3451. For dated references, subsequent amendments to, or revisions of, this publication do not apply. However, parties to agreements based on this part of ISO 3451 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3451-1:1997, Plastics — Determination of ash — Part 1: General methods

3 Principle

3.1 Method A (direct calcination)

The organic matter in a test portion is burnt off and the residue is heated at 950 °C until constant mass is reached.

3.2 Method B (calcination, with sulfuric acid treatment after combustion)

The organic matter in a test portion is burnt off, the residue is converted into sulfates using concentrated sulfuric acid and, finally, the residue is heated at 950 °C until constant mass is reached.

3.3 Method C (calcination, with sulfuric acid treatment before combustion)

The organic matter in a test portion is burnt off after adding concentrated sulfurio acid and the residue is heated at 950 °C until constant mass is reached. This method is recommended over method B because of the better reproducibility of the results.