SLOVENSKI PREDSTANDARD

OSIST prEN 14942-2:2004

september 2004

Baker in bakrove zlitine - Ugotavljanje vsebnosti arzena - 2. del: Metoda FAAS

Copper and copper alloys - Determination of arsenic content - Part 2: FAAS method

iTeh Standards
(https://standards.iteh.ai)
Document Preview

SIST EN 14942-2:2006
https://standards.iteh.ai/catalog/standards/sist/9de281ca-75f4-4a6e-b48a-0784b2885e7c/sist-en-14942-2-2006

ICS 77.120.30

Referenčna številka
OSIST prEN 14942-2:2004(en)

© Standard je založil in izdal Slovenski inštitut za standardizacijo. Razmnoževanje ali kopiranje celote ali delov tega dokumenta ni dovoljeno

iTeh Standards
(https://standards.iteh.ai)
Document Preview

SIST EN 14942-2:2006
https://standards.iteh.ai/catalog/standards/sist/9de281ca-75f4-4a6e-b48a-0784b2885e7c/sist-en-14942-2-2006

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 14942-2

May 2004

ICS

English version

Copper and copper alloys - Determination of arsenic content - Part 2: FAAS method

Cuivre et alliages de cuivre - Dosage de l'arsenic - Partie 2 : Méthode par spectrométrie d'absorption atomique dans la flamme (SAAF)

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 133.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

iTeh Standards
(https://standards.iteh.ai)
Document Preview
SIST EN 14942-2:2006
https://standards.iteh.ai/catalog/standards/sist/9de281ca-75f4-4a6e-b48a-0784b2885e7c/sist-en-14942-2-2006

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

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

© 2004 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. prEN 14942-2:2004: E

Contents

iTeh Standards
(https://standards.iteh.ai)
Document Preview

SIST EN 14942-2:2006
https://standards.iteh.ai/catalog/standards/sist/9de281ca-75f4-4a6e-b48a-0784b2885e7c/sist-en-14942-2-2006

Foreword

This document (prEN 14942-2:2004) has been prepared by Technical Committee CEN/TC 133 "Copper and copper alloys", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

Within its programme of work, Technical Committee CEN/TC 133 requested CEN/TC 133/WG 10 "Methods of analysis" to prepare the following standard:

prEN 133/136-2, *Copper and copper alloys — Determination of arsenic content — Part 2: FAAS method.*

This is one of two parts of the standard for the determination of arsenic content in copper and copper alloys. The other part is:

prEN 133/136-1, *Copper and copper alloys — Determination of arsenic content — Part 1: Spectrometric method.*

iTeh Standards
(https://standards.iteh.ai)
Document Preview

SIST EN 14942-2:2006
https://standards.iteh.ai/catalog/standards/sist/9de281ca-75f4-4a6e-b48a-0784b2885e7c/sist-en-14942-2-2006

1 Scope

This part of this European Standard specifies a flame atomic absorption spectrometric method (FAAS) for the determination of the arsenic content of copper and copper alloys in the form of unwrought, wrought and cast products.

The method is applicable to products having arsenic mass fractions between 0,005 % and 1,5 %.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

ISO 1811-1, *Copper and copper alloys — Selection and preparation of samples for chemical analysis — Part 1: Sampling of cast unwrought products.*

ISO 1811-2, *Copper and copper alloys — Selection and preparation of samples for chemical analysis — Part 2: Sampling of wrought products and castings.*

NOTE Informative references to documents used in the preparation of this standard, and cited at the appropriate places in the text, are listed in the bibliography.

iTeh Standards
(https://standards.iteh.ai)
Document Preview
SIST EN 14942-2:2006
https://standards.iteh.ai/catalog/standards/sist/9de281ca-75f4-4a6e-b48a-0784b2885e7c/sist-en-14942-2-2006

3 Principle

Dissolution of a test portion in hydrochloric acid and hydrogen peroxide followed, after suitable dilution, by aspiration into an air/acetylene flame of an atomic absorption spectrometer. Measurement of the absorption of the 193,7 nm line emitted by an arsenic hollow-cathode or electrodeless discharge lamp.

4 Reagents and materials

4.1 General

During the analysis, use only reagents of recognized analytical grade and only distilled water or water of equivalent purity.

4.2 Hydrochloric acid, HCl (ρ = 1,19 g/ml).

4.3 Hydrochloric acid solution, 7 + 3.

Dilute 700 ml of hydrochloric acid (4.2) with 300 ml of water.

4.4 Hydrogen peroxide, H_2O_2 30 % (mass fraction) solution.

4.5 Potassium hydroxide, KOH 20 % (ρ = 1,19 g/ml).

Weigh 20,0 g of potassium hydroxide pellets and dissolve gently in 50 ml of water. Cool to room temperature and dilute to 100 ml with water.