

Chemical analysis of refractory products by XRF - Fused cast bead method

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 12677:2004 sisaldab Euroopa standardi EN ISO 12677:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 12677:2004 consists of the English text of the European standard EN ISO 12677:2003.</p> <p>This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This International Standard specifies a method for chemical analysis of refractory products and materials and technical ceramics, composed of oxides, including the determination of oxide at levels between 0,01 % and 99 % content by the XRF fused cast bead method</p>	<p>Scope:</p> <p>This International Standard specifies a method for chemical analysis of refractory products and materials and technical ceramics, composed of oxides, including the determination of oxide at levels between 0,01 % and 99 % content by the XRF fused cast bead method</p>
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ICS 81.080

Võtmesõnad: analysis, chemical analysis and testin, mas, materials, mathematical calculations, methods, methods of analysis, refractory, refractory materials, refractory products, shaped refractories, testing, verification, x- ray fluorescence spectrometry, x-ray fluorescence

English version

Chemical analysis of refractory products by XRF

Fused cast bead method

(ISO 12677 : 2003)

Analyse chimique des matériaux réfractaires par fluorescence de rayons X – Méthode de la perle fondue
(ISO 12677 : 2003)

Chemische Analyse von feuerfesten Erzeugnissen durch Röntgenfluoreszenz – Schmelzaufschluss-Verfahren
(ISO 12677 : 2003)

This European Standard was approved by CEN on 2003-04-16.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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

Foreword

International Standard

ISO 12677 : 2003 Chemical analysis of refractory products by XRF – Fused cast bead method, which was prepared by ISO/TC 33 'Refractories' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 187 'Refractory products and materials', the Secretariat of which is held by BSI, 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 November 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 12677 : 2003 was approved by CEN as a European Standard without any modification.

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

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1 Scope

This International Standard specifies a method for chemical analysis of refractory products and materials, and technical ceramics composed of oxides, including the determination of oxide at levels between 0,01 % and 99 % by means of the XRF fused cast bead method.

NOTE Constituents at concentrations greater than 99 % (on a dried basis) should be reported on by difference, provided that all likely minor constituents and any loss on ignition have been determined. These figures should also be checked by direct determination.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO Guide 34:2000, *General requirements for the competence of reference material producers*

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

ISO 10058, *Magnesites and dolomites — Chemical analysis*

ISO/IEC Directives (1992) — Part 2: *Methodology for the development of International Standards — Annex B Mention of reference materials*

EN 955-2, *Chemical analysis of refractory products — Part 2: Products containing silica and/or alumina (wet method)*

3 Types of material

High alumina ≥ 45 % Al_2O_3

Alumino-silicate 7 % to 45 % Al_2O_3

Silica ≥ 93 % SiO_2

Zircon

Zirconia and zirconates

Magnesia

Magnesia/alumina spinel (~ 70/30)