

Toiduainetega kokkupuutuvad materjalid ja tooted. Termilise löögi ja termilise löögi taluvuse katsemeetodid

Materials and articles in contact with foodstuffs -
Test methods for thermal shock and thermal shock
endurance

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1183:2000 sisaldab Euroopa standardi EN 1183:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1183:2000 consists of the English text of the European standard EN 1183:1997.</p> <p>This document is endorsed on 18.02.2000 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>Käesolev Euroopa standard määrab kindlaks teimimismeetodid termilise löögi ja termilise löögi taluvuse määramiseks habrastel materjalidel, näiteks ahjudes või lauanõudena kasutataval klaasil, klaaskeraamikal ja keraamikal. Kirjeldatakse kahte teimimismeetodit. Teimimismeetodit A kasutatakse termilise löögi suhtes tundlike esemete korral; teimimismeetod B on üldkasutatav.</p>	<p>Scope:</p>
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Võtmesõnad: kööginõud, materjalid, termilise löögi teimid, toiduaine-konteineri kokkupuude, vastupidavus termilisele löögile

Hinnagrupp E

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Descriptors: Testing, materials in contact with foodstuffs, thermal shock resistance.

English version

Materials and articles in contact with foodstuffs

Test methods for thermal shock and thermal shock endurance

Matériaux et objets en contact avec les
denrées alimentaires – Méthodes d'essai
pour le choc thermique et la résistance au
choc thermique

Werkstoffe und Gegenstände in Kontakt
mit Lebensmitteln – Prüfverfahren für
Temperaturschock und Temperatur-
wechselbeständigkeit

This European Standard was approved by CEN on 1997-02-14.

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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.

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CEN

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

This European Standard has been prepared by Technical Committee CEN/TC 194 "Utensils in contact with food", the secretariat of which is held by BSI.

Further European Standards are being prepared with the following titles:

EN 1184 *Materials and articles in contact with foodstuffs*
- *Test methods for translucency of ceramic articles*

EN 1217 *Materials and articles in contact with foodstuffs*
- *Test method for water absorption of ceramic articles*

A further standard is proposed with the following title

Materials and articles in contact with foodstuffs
- *Test method for crazing resistance of ceramic articles*

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 September 1997, and conflicting national standards shall be withdrawn at the latest by September 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies test methods for thermal shock and for thermal shock endurance for brittle materials, for example glass, glass-ceramics and ceramics intended for use in ovens or as tableware.

Two test methods are described:

- Test method A is used for articles known to be sensitive to thermal shock;
- Test method B is generally applicable.

The test method to be applied depends on the intended use of the article and/or its thermal shock resistance.

2 Definitions

For the purpose of this European Standard, the following definitions apply:

2.1 thermal shock: Sudden change in temperature.

2.2 thermal shock endurance, Δt_{50} : Value for the resistance against sudden change in temperature corresponding to the temperature difference at which, for the first time, 50% of the samples fail.

2.3 temperature variation: Difference at any given time between the temperature at the centre of the working space of the water bath or test oven and at any other point in that working space.

2.4 temperature fluctuation: Short term change in temperature at any point in the working space of the water bath or test oven.

3 Principle

Samples are heated and then cooled rapidly under controlled conditions to determine their resistance to thermal shock.

Thermal shock tests are repeated using increasing temperature differences until 50% of the samples fail. The temperature difference Δt_{50} is given as the thermal shock endurance.

4 Apparatus

NOTE: Clauses 4.1, 4.2 and 4.4 apply to method A, clauses 4.1, 4.3, 4.4, 4.5 and 4.6 apply to method B.

4.1 Cold water bath, comprising a bath or tank capable of containing at least five times the apparent volume of the overall dimensions of the samples being tested (including the volume of the basket) at one time; fitted with a water