

Glass containers - Thermal shock resistance and thermal shock endurance - Test methods

Glass containers - Thermal shock resistance and thermal shock endurance - Test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 7459:2004 sisaldab Euroopa standardi EN ISO 7459:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 18.06.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 7459:2004 consists of the English text of the European standard EN ISO 7459:2004. This document is endorsed on 18.06.2004 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 European Standard specifies test methods for determining the thermal shock resistance and thermal shock endurance of glass containers. This European Standard does not apply to the determination of properties of laboratory glassware (see ISO 718).	Scope: This European Standard specifies test methods for determining the thermal shock resistance and thermal shock endurance of glass containers. This European Standard does not apply to the determination of properties of laboratory glassware (see ISO 718).
--	--

ICS 55.100

Võtmesõnad: changes of temperature, containers, definition, definitions, determination, glass, packages, packing, quenching, resistance, soda-lime glass, strength of materials, testing, tests, thermal shock endurance, thermal-shock tests

ICS 55.100

English version

Glass containers

**Thermal shock resistance and thermal shock endurance – Test methods
(ISO 7459 : 2004)**

Récipients en verre – Résistance au
choc thermique et endurance au choc
thermique – Méthodes d'essai
(ISO 7459 : 2004)

Behälter aus Glas – Beständigkeit
gegen Abschrecken und Temperatur-
wechselbeständigkeit – Prüfverfahren
(ISO 7459 : 2004)

This European Standard was approved by CEN on 2003-11-03.

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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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

Contents

	Page
Foreword.....	3
1 Scope.....	4
2 Terms and definitions.....	4
3 Apparatus.....	4
3.1 Cold water bath.....	4
3.2 Hot water bath.....	4
3.3 Basket.....	4
4 Sampling.....	4
5 Procedure.....	5
6 Thermal shock resistance.....	5
6.1 Pass test.....	5
6.2 Progressive test to a specified percentage of breakages.....	5
6.3 Total progressive test.....	5
6.4 High-level test.....	5
7 Thermal shock endurance.....	5
8 Safety requirements.....	6
9 Test report.....	6
Bibliography.....	7

Foreword

This document (EN ISO 7459:2004) has been prepared by Technical Committee CEN /TC 261, "Packaging", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 63 "Glass containers".

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 2004, and conflicting national standards shall be withdrawn at the latest by September 2004.

This document includes a Bibliography.

Efficient packaging is of great importance for the distribution and the protection of goods and the environment. Insufficient or inappropriate packaging can lead to damage or wastage of the contents of the pack.

This standard is part of a series of standards for "Glass containers - Test methods":

- EN ISO 7458, *Glass containers — Internal pressure resistance — Test methods (ISO 7458:2004)*
- EN ISO 7459, *Glass containers — Thermal shock resistance and thermal shock endurance — Test methods (ISO:2004)*
- prEN ISO 8106, *Glass containers — Determination of capacity by gravimetric method — Test method (ISO/FDIS 8106:2003)*
- EN ISO 8113, *Glass containers — Resistance to vertical load — Test method (ISO 8113:2004)*
- EN 29008, *Glass bottles — Verticality — Test method (ISO 9008:1991)*
- EN 29009, *Glass containers — Height and non-parallelism of finish with reference to container base — Test methods (ISO 9009:1991)*
- EN 29885, *Wide-mouth glass containers — Deviation from flatness of top sealing surface — Test methods (ISO 9885:1991)*

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