

Mechanical dishwashing resistance of utensils - Part 5: Rapid test for ceramic catering articles

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12875-5:2006 sisaldab Euroopa standardi EN 12875-5:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.04.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12875-5:2006 consists of the English text of the European standard EN 12875-5:2006.</p> <p>This document is endorsed on 28.04.2006 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 European Standard specifies a rapid method for testing the dishwashing resistance of catering articles made of ceramics. It does not define the number of dishwashing cycles that any given product should withstand. The method tests the dishwashing durability of the glaze surface of the ceramic articles.</p>	<p>Scope:</p> <p>This European Standard specifies a rapid method for testing the dishwashing resistance of catering articles made of ceramics. It does not define the number of dishwashing cycles that any given product should withstand. The method tests the dishwashing durability of the glaze surface of the ceramic articles.</p>
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ICS 67.250, 97.040.40, 97.040.60

Võtmesõnad:

ICS 67.250; 97.040.40; 97.040.60

English Version

**Mechanical dishwashing resistance of utensils - Part 5: Rapid
test for ceramic catering articles**

Résistance mécanique au lave-vaisselle des ustensiles -
Partie 5: Essai accéléré pour les articles en céramique pour
collectivités

Spülmaschinenbeständigkeit von Gegenständen - Teil 5:
Schnellverfahren für keramische Gegenstände für den
gewerblichen Gebrauch

This European Standard was approved by CEN on 13 February 2006.

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This European Standard exists 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 Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 12875-5:2006) has been prepared by Technical Committee CEN/TC 194 "Utensils in contact with food", the secretariat of which is held by BSI.

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 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This European Standard specifies an accelerated test for the determination of the dishwashing resistance of catering articles made of ceramics.

Further parts of EN 12875, under the general title *Mechanical dishwashing resistance of utensils* that have already been published or are in preparation are as follows:

Part 1: *Reference test method for domestic articles*

Part 2: *Inspection of non-metallic articles*

Part 4: *Rapid test for domestic ceramic articles*

Part 5: *Rapid test for ceramic catering articles*

The accelerated test is a useful method for predicting the dishwashing resistance of the glaze surface of ceramic products intended for catering use. The catering industry requires significant quantities of products that are decorated on the glaze surface (for example customized or bespoke ware), and such ware may have an overall durability which is lower than that of the glaze surface itself. A convenient method to test on-glaze decorated ware is referred to in the Note to 4.2; however, testing by this modified procedure will not be in accordance with EN 12875-5.

Note that the reference test method (EN 12875-1) is based on a multi-cyclic test in a modified domestic dishwashing machine, and utilizes an alkaline domestic dishwashing detergent.

It is intended that the inspection procedure given in EN 12875-2 be used to examine ceramic catering articles which have been subjected to the rapid test.

1 Scope

This European Standard specifies a rapid method for testing the dishwashing resistance of catering articles made of ceramics. It does not define the number of dishwashing cycles that any given product should withstand. The method tests the dishwashing durability of the glaze surface of the ceramic articles.

2 Normative references

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

EN 12875-2:2001, *Mechanical dishwashing resistance of utensils – Part 2: Inspection of non-metallic articles*

EN ISO 3696:1995, *Water for analytical laboratory use - Specification and test methods (ISO 3696:1987)*

3 Principle

Unused specimens of ware are immersed in a static solution of a specified alkaline dishwashing detergent at $(75 \pm 1) ^\circ\text{C}$ for a total of 16 hours. The specimens are then examined visually and compared with similar, untested pieces to determine any changes in gloss or colour resulting from detergent attack.

4 Reagents

4.1 Detergent formulation

For the purposes of this test, a liquid detergent having the following chemical composition shall be used:

Technical grade sodium hydroxide	15 % w/w
Nitrilotriacetic acid, trisodium salt	16 % w/w
Water (grade 3 as specified in EN ISO 3696:1995)	69 % w/w

4.2 Detergent solution

2,0 % (w/w) aqueous solution of detergent (4.1) prepared with distilled water or water of equivalent purity (grade 3 water as specified in EN ISO 3696:1995).

NOTE Testing in a 0,3% (w/w) solution of the detergent may provide useful information on the performance of catering ware for special applications, for example on-glaze decorated ware (including gold decoration). However, testing using the 0,3% detergent solution will not be in accordance with EN 12875-5.

Sufficient detergent solution is required to ensure that the total ware surface area to test solution volume does not exceed $130 \text{ cm}^2/\text{l}$.

5 Apparatus

5.1 Stainless steel tank with a close-fitting stainless steel lid, capable of holding at least 10 litres of detergent solution.