

**Paper and board intended to come into contact with
foodstuffs - Sensory analysis - Part 2: Off-flavour (taint)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1230-2:2009 sisaldab Euroopa standardi EN 1230-2:2009 ingliskeelset teksti.

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English Version

**Paper and board intended to come into contact with foodstuffs -
Sensory analysis - Part 2: Off-flavour (taint)**

Papier et cartons destinés à entrer en contact avec les
denrées alimentaires - Analyse sensorielle - Partie 2 :
Flaveur atypique (flaveur ou odeur parasite)

Papier und Pappe vorgesehen für den Kontakt mit
Lebensmitteln - Sensorische Analyse - Teil 2:
Geschmacksübertragung

This European Standard was approved by CEN on 5 October 2009.

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 CEN Management Centre or to any CEN member.

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 CEN Management Centre has the same status as the official versions.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 1230-2:2009) has been prepared by Technical Committee CEN/TC 172 “Pulp, paper and board”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1230-2:2001 and EN 1230-2:2001/AC 2002.

With regard to EN 1230-2:2001 and EN 1230-2:2001/AC:2002 the following changes have been made:

- a) including coconut oil for fatty food and icing sugar for example for dry, non-fatty food (see 5.1);
- b) including the references to CEN/TR 15645-2 and CEN/TR 15645-3 (Note in Clause 6);
- c) simplifying the descriptions of evaluation scale of off-flavour (see 12.3 and Annex C);
- d) incorporation of EN 1230-2:2001/AC: 2002;
- e) editorial updating.

EN 1230 consists of the following parts, under the general title *Paper and board intended to come into contact with foodstuffs – Sensory analysis*:

- Part 1: Odour
- Part 2: Off-flavour (taint)

Annexes A, B and C are informative; Annex D is normative.

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

Introduction

The taint test is valid for evaluation of whether the material to be tested may bring about a change in the taste (flavour) of the food to be in contact with the material. The test serves for evaluating the possible off-flavour transmitted from a paper and board intended for food packaging or otherwise to come into contact with foodstuffs. According to the results conclusions may be drawn as to the suitability of the material tested for packaging of foodstuffs.

For evaluation of the test substance three alternative testing procedures are described:

- a) the triangle test;
- b) the extended triangle test;
- c) the multicomparison test.

It is recommended to use the triangle test when rating of the intensity of taint is not needed. This test is less affected by the presence of atypical data than the multicomparison test.

The multicomparison test may be preferred when a large number of samples are to be tested, as this procedure is less time consuming compared to the triangle tests. It is also the most common sensory test applied for evaluation of paper and board. The method is statistically less efficient than the triangle test.

NOTE The triangle and the extended triangle tests are described in detail in ISO 5492. The multicomparison test is not described in any ISO Standard.

In order to give reliable results this test should be performed by selected assessors.

The result may be influenced by the time elapsed between manufacturing and testing as well as by the storage conditions of the paper or board.

"Part 1: Odour" comprises the corresponding method for the estimation of odour originating from paper or board intended for food contact.

1 Scope

This European Standard specifies whether a paper or board sample contains substances which may be transmitted through the air space to a test substance and affect its taste. It is applicable to all kinds of paper and board, including coated and printed material, intended to come into contact with foodstuffs. It is not applicable for the determination of consumers' preference.

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.

EN ISO 186:2002, *Paper and board — Sampling to determine average quality (ISO 186:2002)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

taste

sensations perceived by the taste organ when stimulated by certain soluble substances

[ISO 5492:2008]

3.2

flavour

complex combination of the olfactory, gustatory and trigeminal sensations perceived during tasting

NOTE The flavour may be influenced by tactile, thermal, painful and/or kinaesthetic effects. [ISO 5492]

3.3

taint

taste or odour foreign to the product

[ISO 5492:2008]

3.4

off-flavour

atypical flavour often associated with deterioration or transformation of the product

[ISO 5492:2008]

NOTE For simplicity, taste and flavour are used as synonyms in this European Standard, though this is not exactly in accordance with ISO 5492. The same regards taint and off-flavour.

3.5

sample

the aggregate of all the specimens taken from the lot to provide information on the average quality of the lot and possibly serve as a basis for a decision on the lot

[EN ISO 186:2002]