TECHNICAL REPORT

CEN/TR 15645-2

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

January 2008

ICS 67.250: 85.060

English Version

Paper and board intended to come into contact with foodstuffs -Calibration of the off flavour test - Part 2: Fatty food

Papiers et cartons destinés en entrer en contact avec les denrées alimentaires - Étalonnage des essais de flaveur atypique - Partie 2 : Aliments gras Papier und Pappe vorgesehen für den Kontakt mit Lebensmitteln - Kalibrierung für die Geschmacksprüfung -Teil 2: Fettende Lebensmittel

This Technical Report was approved by CEN on 13 August 2007. It has been drawn up by the Technical Committee CEN/TC 172.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

Cont		_
Forewo	ord	4
	iction	
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Principle	<u>7</u>
5 5.1 5.2 5.3	Materials an reagents General Test substance Spiking compound	38 38
6 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8	Equipment General	88 38 38
7 7.1 7.2 7.3 7.3.1	Preparation of calibration samples General Preparation of the calibration samples Preparation of test portions from a calibration sample General	9 9
8 8.1 8.2 8.3 8.4	Sensory tests	.12 .12 .12
9 9.1 9.2 9.3 9.4	Test procedure for sensory panel	.13 .13 .14
10 10.1 10.2	Data collection and reporting General Data format	.16 .16
11	Data analysis	
Annex	A (informative) Specification of coconut oil	17
Annex	B (informative) Experimental design for sample evaluation before training (Rep 1 and Rep 2)	
Annex	C (informative) Example of evaluation form to be used during assessments (first step and third step)	.19
Δnnex	D (informative) Example of evaluations form to be used during training (second step)	20

CEN/TR 15645-2:2008 (E)

Annex E (informative) Experimental design for sample evaluation after training (Rep1 and Rep2)	21
Annex F (informative) Example of data entry sheets for the first step	22
Annex G (informative) Example of data entry sheets for the third step	26
Annex H (informative) Method of chemical analysis	30
Annex I (informative) Mood's median test	
Annex J (informative) Tukey's Quick (Pocket) Test	
Bibliography	36
Bibliography	
9,	
2	
O ,	

Foreword

This document (CEN/TR 15645-2:2008) has been prepared by Technical Committee CEN/TC 172 "Pulp, paper and board", the secretariat of which is held by DIN.

ibility
2) shall . 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.

Introduction

Paper and board, intended to be in contact with food, may have characteristic off-flavours that can migrate via airspace to the food packed in it. The purpose of testing the off-flavour of food in contact with paper and board is to establish whether the material to be tested possesses an inherent off-flavour when kept at room temperature.

In order to gain reliable results from the sensory evaluation, the performance of a sensory panel assessing the off-flavour within test material needs to be validated. This can be implemented through a training procedure by using spiked calibration samples prepared according to the given instructions.

This document consists of:

- protocol to prepare the calibration samples (spiked coconut fat) for sensory evaluation of off-flavour;
- description of the training procedure for a sensory panel in the use of the calibration samples;
- instructions for sensory evaluation of calibration samples before and after training.

This guide is meant to be used in connection with the European Standard EN 1230-2. The guidance given in this document is only a recommendation. Please note that the calibration samples in which preparation is described, can be applied also other ways than described in this document.

This guide has been devised and collaboratively tested in the context of the EU research project CALIBSENSORY (Growth programme, Measurement and Testing activity, GRD2-2000-30015) and it is the sole responsibility of its authors. It does in no way represent the views of the Commission or its services. Published results of the project are available at http://www1.kcl.fi/euproj/calib.html .

1 Scope

This Technical Report specifies a written protocol to prepare calibration samples for assessing off-flavour (given by benzaldehyde) in a test substance representative of fatty food products (coconut oil). Essentially, this is meant to simulate the transfer of off-flavours from paper and board to a fatty food product.

This Technical Report also specifies how to train the panel in the use of the calibration samples.

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 6658, Sensory analysis – Methodology – General guidance

ISO 8586-1, Sensory analysis – General guidance for the selection, training and monitoring of assessors – Part1: Selected assessors