# TECHNICAL REPORT

# **CEN/TR 15645-1**

# RAPPORT TECHNIQUE

# TECHNISCHER BERICHT

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## **English Version**

# Paper and board intended to come into contact with foodstuffs - Calibration of the odour test - Part 1: Odour

Papiers et cartons destinés en entrer en contact avec les denrées alimentaires - Etalonnage de l'essai de flaveur atypique - Partie 1: Odeur Papier und Pappe vorgesehen für den Kontakt mit Lebensmitteln - Kalibrierung der Geschmacksprüfung - Teil 1: Geruch und Aroma

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

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# **Foreword**

This document (CEN/TR 15645-1:2008) 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 odour that can migrate via the airspace to the food packed in it. The purpose of testing the odour of paper and board is to establish whether the material to be tested possesses an inherent odour when kept at room temperature.

In order to gain reliable results from the sensory evaluation, the performance of a sensory panel assessing the odour of paper and board 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 paper) for sensory evaluation of odour;
- 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 1230-1. The guidance given in this document is only a recommendation. Please note that the calibration samples, the preparation of which is described, can be also applied in 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 assessment of odour released by a paper or board sample, and how to train the panel in the use of these calibration samples.

The general outline of the testing procedure consists of sensory assessment of the odour samples without formal training by a selected panel, followed by training of the panel, and finally sensory assessment of the odour samples after training by the same sensory panel.

## 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 5496, Sensory analysis — Methodology — Initiation and training of assessors in the detection and recognition of odours

ISO 6658, Sensory analysis — Methodology — General guidance

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

#### 3 Terms and definitions

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

#### 3.1

#### assessor

any person taking part in a sensory test

[see ISO 5492:1992]

#### 3.2

#### base paper

paper that has minimal number of sensory properties

#### 3.3

## calibration procedure

protocol of calibration samples and written instructions to train selected assessors with calibration samples i.e. calibrate the panel

## 3.4

## calibration sample

base paper that is spiked with spiking compounds at a certain concentration

#### 3.5

#### control sample

a hidden reference sample served blind coded to the assessors among the calibration samples, and prepared according to the procedure of the calibration samples but without the spiking compound