
**Sensory analysis — Methodology —
General guidance for establishing a
sensory profile**

*Analyse sensorielle — Méthodologie — Directives générales pour
l'établissement d'un profil sensoriel*



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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 34, *Food products*, Subcommittee SC 12, *Sensory analysis*.

This second edition cancels and replaces the first edition (ISO 13299:2003), which has been technically revised by presenting the principles and methods in general, including some new ones, which are developed in the annexes.

Introduction

The purpose of this International Standard is to serve as guidance for establishing sensory profiles performed by trained assessors.

A sensory profile is the result of a descriptive analysis of a sample by a panel of assessors. The sample may be for example food, beverage, tobacco product, cosmetic, textile, paper, packaging, sample of air or water, etc. Profiling can be carried out in a number of ways. Over the years, a few of these have been formalized and codified as descriptive procedures by professional societies or by groups of producers and users for the aim of improving communication between themselves.

The purpose of this International Standard is to provide agreed guidelines for descriptive sensory procedures.

Sensory profiling is the description of sensory properties of a sample, usually consisting in the evaluation of sensory attributes with assignment of an intensity value for each attribute. The attributes are generally evaluated in the order of perception. Some sensory profiles take a view across all of the senses; others (partial profiles) concentrate in detail on particular senses.

Quality of results depends on the number of assessors and their ability to describe their perceptions. Training and development of a common language help to improve these abilities. Some methods have been used with untrained assessors, but it is out of the scope of this International Standard. Quality of results can also depend on the number of replications by an assessor.

Sensory analysis — Methodology — General guidance for establishing a sensory profile

1 Scope

This International Standard gives guidelines for the overall process for establishing a sensory profile. Sensory profiles can be established for all products or samples which can be evaluated by the senses of sight, odour, taste, touch, or hearing (e.g. food, beverage, tobacco product, cosmetic, textile, paper, packaging, sample of air or water). This International Standard can also be useful in studies of human cognition and behaviour.

Some applications of sensory profiling are as follows:

- to develop or change a product;
- to define a product, production standard, or trading standard in terms of its sensory attributes;
- to define a reference “fresh” product for shelf-life testing;
- to study and improve shelf-life of a product;
- to compare a product with a reference product or with other similar products on the market or under development;
- to map a product’s perceived attributes for the purpose of relating them to factors such as instrumental, chemical or physical properties, and/or to consumer acceptability;
- to characterize by type and intensity the off-odours or off-tastes in a sample (e.g. in pollution studies).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5492, *Sensory analysis — Vocabulary*

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, *Sensory analysis — General guidelines for the selection, training and monitoring of selected assessors and expert sensory assessors*

ISO 8589, *Sensory analysis — General guidance for the design of test rooms*

ISO 11035, *Sensory analysis — Identification and selection of descriptors for establishing a sensory profile by a multidimensional approach*

ISO 11136, *Sensory analysis — Methodology — General guidance for conducting hedonic tests with consumers in a controlled area*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5492 and the following apply.