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**Sensory analysis — Guidelines for  
sensory assessment of the colour of  
products**

*Analyse sensorielle — Lignes directrices pour l'évaluation sensorielle  
de la couleur des produits*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 11037 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 12, *Sensory analysis*.

This second edition cancels and replaces the first edition (ISO 11037:1999), which has been technically revised.

## Introduction

For standardized colour comparison, it is necessary to have an assessor with normal colour vision and to have reproducible illumination and viewing conditions. It is usual to match colours to a standard in daylight, but the spectral composition of daylight varies considerably. Although it is difficult to control precisely the spectral distribution of artificial light sources, individual sources are more stable over a limited period than daylight and therefore enable more reproducible colour comparisons to be made.

Unless otherwise agreed, the methods specified in this International Standard use diffuse daylight or an artificial daylight source representative of a phase of daylight with a correlated colour temperature of 6 500 K (CIE standard illuminant D65) for routine comparisons. If there is a dispute, the comparison should always be made under the specified artificial light.

Standards produced by the Commission Internationale de l'Éclairage (CIE) and other documents (see the bibliography) are a primary source of internationally accepted and agreed data for light and lighting, for which international harmonization requires unique definitions. Note that, in documents relating only to visual judgements, the term "observer" is frequently used in place of "assessor".



# Sensory analysis — Guidelines for sensory assessment of the colour of products

## 1 Scope

This International Standard establishes guidelines for the sensory evaluation of the colours of products. The procedures specified are applicable to solid, semi-solid, powder and liquid products, which can be opaque, translucent, cloudy or transparent in nature, as well as matt or glossy.

General information is also given about the viewing and lighting conditions to be used in various situations in sensory analysis, such as difference testing, profile analysis and grading methods, performed by panels of selected assessors or by individual experts in special situations.

This International Standard does not deal with consumer testing or with assessment of the metamerism of colours of food products.

NOTE 1 Metameric matches are described in Annex A.

NOTE 2 Particular products can be subject to specific International Standards for their sensory analysis, e.g. ISO 3591<sup>[1]</sup>, which specifies a wine-tasting glass.

## 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 5492, *Sensory analysis — Vocabulary*

ISO 6658, *Sensory analysis — Methodology — General guidance*

ISO 8586<sup>1)</sup>, *Sensory analysis — General guidance for the selection, training and monitoring of selected and expert assessors*

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

IEC 60050-845|CIE 17:1987, *International electrotechnical vocabulary — Chapter 845: Lighting|International lighting vocabulary*

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1) To be published. (Revision of ISO 8586-1:1993 and ISO 8586-2:2008)