

ICS 67.240

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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 21172-2022

Replacing GB/T 21172-2007

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

Issued on: October 12, 2022

Implemented on: May 1, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules for Standardization Documents" drafting.

This document replaces GB/T 21172-2007 "General principles and test methods for

sensory analysis of food color evaluation", and GB/T 21172-

Compared with.2007, except for structural adjustment and editorial changes, the main technical changes are as follows.

- a) Added terms and definitions (see Chapter 3);
- b) Changed the requirements for the work area (see 4.3, 4.3 of the.2007 edition);
- c) Change "liquid sample" to "opaque liquid sample" (see 5.5.1.3, 5.5.1.3 of the.2007 edition);
- d) Added relevant index parameters for the evaluation of "clarified liquid samples" (see 5.5.2.8, 5.5.2.8 of the.2007 edition).

This document is equivalent to ISO 11037.2011 "Guidelines for Sensory Evaluation of Color of Sensory Analysis Products".

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Standardized color sensory evaluation, carried out by evaluators with normal color vision under reproducible lighting conditions and evaluation conditions. usually in

The color matching between the sample and the standard is carried out under sunlight, but the spectral composition of sunlight varies greatly. Although the spectral distribution of artificial sunlight sources is difficult

Precisely controlled, but more stable than daylight within a specified time, thus ensuring better repeatability of color evaluation results.

Unless otherwise approved, this document specifies the use of diffuse sunlight of a specific phase or an artificial light source with a color temperature of 6500K (CIE

Standard illuminant D65) for routine comparison. In case of dispute, the color evaluation shall be carried out under a specific artificial daylight source.

In order to implement the national standards in a consistent manner, the light source and illuminant data should be based on the relevant national standards. It should be noted that, in the

In documents related to visual evaluation, "observer" is often used instead of "evaluator".

Sensory Analysis Guidelines for Sensory Evaluation of Product Color

1 Scope

This document provides guidelines for the sensory evaluation of product color.

This document applies to solid, semi-solid, powder and liquid products that are opaque, cloudy, translucent, transparent, matte and glossy.

This document presents sensory analyzes (e.g. differentials conducted by a panel of preferred assessors or in specific cases by independent experts).

Requirements for evaluation and lighting conditions in various situations in individual inspection, profile analysis and grading method.

This document is not intended for consumer testing, nor for the evaluation of metamerism in the color of food products.

Note 1. See Appendix A for metamerism matching.

Note 2. The sensory evaluation of the color of a specific product is in accordance with the provisions of the corresponding international documents, such as GB/T 40003-2021 [1] stipulates the evaluation requirements for wine tasting glasses.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

ISO 5492 Sensory Analysis-Vocabulary

Note. GB/T 10221-2021 Sensory Analysis Terminology (ISO 5492:2008, IDT)

ISO 6658 Sensory analysis-Methodology-General guidance

Note. GB/T 10220-2012 General Introduction to Sensory Analysis Methodology (ISO 6658:2005, IDT)

ISO 8586 General guidelines for the selection, training and supervision of preferred and expert assessors for sensory analysis (Sensory analysis-
sory assessors)

ISO 8589 Sensory analysis General guidelines for the establishment of sensory analysis laboratories (Sensory analysis-General guidance for

Note. GB/T 13868 Sensory Analysis General Guidelines for Establishing Sensory Analysis Laboratories (ISO 8589:2007, IDT)

Note. GB/T 2900.65-2004 Electrotechnical term lighting (IEC 60050-845|CIE 17:1987, MOD)

3 Terms and Definitions

ISO 5492 and IEC 60050-845 | CIE17 defined and the following terms and definitions apply to this document.

3.1

Personnel involved in sensory evaluation of product color.

[Source. GB/T 10221-2021, 3.5, with modifications]

3.2

hue hue

The surface exhibits visual properties similar to one or a combination of the perceived colors red, yellow, green, and blue.