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

GB/T 47337-2026

**Oils of Citrus - Determination of CD value by ultraviolet
spectrometric analysis**

柑橘属精油 紫外吸收光谱分析法测定CD值

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

This document adopts ISO 4735:2002 "Determination of CD value by ultraviolet absorption spectrometry of citrus essential oils".

1 Scope

This document describes a method for determining the CD value of citrus essential oils using ultraviolet absorption spectroscopy.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

Note: GB/T 14454.1-2008 Preparation of Fragrance Samples (ISO 356:1996, MOD) flasks)

Note: GB/T 12806-2011 Laboratory Glassware - Single-mark volumetric flasks (ISO 1042:1998, NEQ)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 CD value

The CD value is determined according to the test quantities specified in the relevant essential oil standards and expressed in units of absorbance.

Note: Segment CD is obtained as follows. Draw tangents through the two parts of the curve to obtain points A and B. Then, draw a line parallel to the absorption axis through point D, where the maximum absorption value is reached.

The straight line. This parallel line intersects the tangent at point C and the wavelength axis at point E (see Figure 1).

Plot the absorption curve of the ethanol solution of the tested essential oil in the wavelength range of 220nm~440nm, and calculate the CD value.

4 Principles

Note: This method may also be used to determine the CD/DE ratio (see Figure 1).