## INTERNATIONAL STANDARD

ISO 10519

Third edition 2015-09-15

# Rapeseed — Determination of chlorophyll content — Spectrometric method

Graines de colza — Détermination de la teneur en chlorophylle — Méthode spectrométrique



#### ISO 10519:2015(E)



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#### **Foreword**

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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 2, *Oleaginous seeds and fruits and oilseed meals*.

This third edition cancels and replaces the second edition (ISO 10519:1997), of which it constitutes a minor revision.

Annex A of this International Standard is for information only.

### Rapeseed — Determination of chlorophyll content — Spectrometric method

#### 1 Scope

This International Standard specifies a spectrometric method for the determination of the chlorophyll content of rapeseed. It is not applicable to the determination of chlorophyll in oils.

#### 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 648, Laboratory glassware — Single-volume pipettes

ISO 664, Oilseeds — Reduction of laboratory sample to test sample

ISO 665, Oilseeds — Determination of moisture and volatile matter content

#### 3 Terms and definitions

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

#### 3.1

#### chlorophyll content

mass fraction of substances in the sample contributing to the absorption band at a wavelength near 665 nm, as determined under the operating conditions specified in this International Standard and measured as chlorophyll A

Note 1 to entry: The chlorophyll content is expressed in milligrams per kilogram.

#### 4 Principle

Extraction of a test portion in a suitable apparatus with a specified extraction solvent. Spectrometric determination of the chlorophyll content of the extracted solution.

#### 5 Reagent

Use only reagents of recognized analytical grade unless otherwise stated.

#### 5.1 Extraction solvent

Transfer to a 500 ml beaker 100 ml of anhydrous ethanol. Add to the contents of the beaker 300 ml of anhydrous *iso*-octane (2,2,5-trimethylpentane) or anhydrous technical *n*-heptane or anhydrous petroleum ether (essentially composed of C<sub>7</sub> hydrocarbons, with a boiling range between 90 °C and 100 °C).

#### 6 Apparatus

Usual laboratory apparatus and, in particular, are the following.