
**Rapeseed and rapeseed meals —
Determination of glucosinolates
content — Method using high-
performance liquid chromatography**

*Graines et tourteaux de colza — Dosage des glucosinolates —
Méthode par chromatographie liquide à haute performance*

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Foreword

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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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 2, *Oleaginous seeds and fruits and oilseed meals*.

This first edition cancels and replaces ISO 9167-1:1992, which has been technically revised. It also incorporates the amendment ISO 9167-1:1992/Amd.1:2013. The main changes are as follows:

- rapeseed meals have been added to the scope with the addition of a new collaborative trial;
- in 9.2, methanol 70 % has been replaced by ethanol 50 % for lower toxicity^[6];
- in 9.2, only one extraction is carried out instead of two;
- in 10.2 and E.5.1, the term “relative proportionality factor” has been used instead of “response factor”;
- the isocratic mode has been added in Annex E.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The glucosinolates in rapeseed can be analysed by chromatographic, enzymatic or spectroscopic methods. This document describes a chromatographic method with two conditions (gradient and isocratic) of elution for qualitative and quantitative analysis of individual glucosinolates in rapeseed and rapeseed meals. The method with gradient elution is considered as the reference method whereas the method with isocratic elution is considered as a simplified method and is presented in [Annex E](#) as information.

This document specifies a method using high-performance liquid chromatography (HPLC) with gradient elution as reference method. For the isocratic mode, the choice of the internal standard, the chromatographic conditions and the separation results are different from the reference method. These aspects are discussed in [Annex E](#).

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