



**International
Standard**

ISO 29822-2

**Vegetable fats and oils —
Determination of the content
and relative amounts of 1,2- and
1,3-diacylglycerols —**

**Part 2:
Isolation by solid phase extraction
(SPE)**

**First edition
2026-03**

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 11, *Animal and vegetable fats and oils*.

A list of all parts in the ISO 29822 series can be found on the ISO website.

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 ISO 29822 series can be used for the determination of the content and relative amounts of 1,2- and 1,3-diacylglycerols.

ISO 29822 uses a miniaturized column chromatography on a silica gel column to separate the isomeric diacylglycerols as the more polar fraction from the major part of other lipids. The peak areas of 1,2- and 1,3-isomers are determined by gas chromatography after silylation. Only C32-, C34- and C36-diacylglycerols are taken into account.

This document separates the diacylglycerol fraction by means of a solid phase extraction (SPE) column with diol phase, followed by analysis on capillary gas chromatography after silylation. Only the peak areas of 1,2- and 1,3- isomers of C34- and C36-diacylglycerols are taken into account. Less solvent and preparation are needed than with silica gel column separation where careful preparation with the appropriate percentage of water is necessary to avoid isomerization.

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