SLOVENSKI STANDARD
SIST EN ISO 659:2009

01-december-2009

Nadomeģļ a:
SIST EN ISO 659:1998

Oljna semena - Določ evanje olja (referenļ na metoda) (ISO 659:2009)

Oilseeds - Determination of oil content (Reference method) (ISO 659:2009)

Ölsamen - Bestimmung des Ölgehaltes (Referenzverfahren) (ISO 659:2009)

Graines oléagineuses - Détermination de la teneur en huile (Méthode de référence) (ISO 659:2009)

Ta slovenski standard je istoveten z: EN ISO 659:2009

ICS:

67.200.20	Oljnice	Oilseeds

SIST EN ISO 659:2009 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 659

July 2009

ICS 67.200.20

Supersedes EN ISO 659:1998

English Version

Oilseeds - Determination of oil content (Reference method) (ISO 659:2009)

Graines oléagineuses - Détermination de la teneur en huile (Méthode de référence) (ISO 659:2009)

Ölsamen - Bestimmung des Ölgehaltes (Referenzverfahren) (ISO 659:2009)

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Foreword

This document (EN ISO 659:2009) has been prepared by Technical Committee ISO/TC 34 "Food products" in collaboration with Technical Committee CEN/TC 307 “Oilseeds, vegetable and animal fats and oils and their by-products - Methods of sampling and analysis” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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Endorsement notice

The text of ISO 659:2009 has been approved by CEN as a EN ISO 659:2009 without any modification.

INTERNATIONAL STANDARD

ISO 659

Fourth edition
2009-07-01

Oilseeds — Determination of oil content (Reference method)

Graines oléagineuses — Détermination de la teneur en huile (Méthode de référence)

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 659 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 2, *Oleaginous seeds and fruits and oilseed meals*.

This fourth edition cancels and replaces the third edition[1)] (ISO 659:1998), which has been technically revised. The main change is the inclusion of an additional subclause (Subclause 8.3.5) for the preparation of the test sample in the case of sunflower seed. This different procedure for sunflower seed includes an extra step, viz measurement of the moisture content after grinding the seed. This is necessary to correct for the loss of moisture caused by the heating of the seed which occurs during grinding due to the particular physical nature of sunflower seed.

1) Users should note that the front cover and foreword of ISO 659:1998 indicate erroneously that it is the second edition, whereas it is in fact the third.

Oilseeds — Determination of oil content (Reference method)

1 Scope

This International Standard specifies a reference method for the determination of the hexane extract (or light petroleum extract), called the "oil content", of oilseeds used as industrial raw materials. The procedure for sunflower seed is different from those for other seeds as it includes an additional moisture content determination after the seed has been ground to prepare the test sample.

The method has been tested on rapeseed, soya beans and sunflower seed. This does not, however, preclude its applicability to other commercial seeds.

If required, the pure seeds and the impurities (see 9.4) can be analysed separately. In the case of groundnuts (see 10.1.6), the pure seeds, the total fines, the non-oleaginous impurities and the oleaginous impurities can be analysed separately.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 658, *Oilseeds — Determination of content of impurities*

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 International Standard, the following terms and definitions apply.

3.1
hexane extract
"oil content"
all the substances extracted under the operating conditions specified in this International Standard, expressed as a percentage by mass of the product as received, or on the cleaned seed

NOTE On request, it may be expressed relative to the dry matter.

4 Principle

The oil is extracted from a test portion, in a suitable apparatus, with hexane or light petroleum. The solvent is removed from the extract and the extract weighed. Due to the varied nature of seeds, there are some variations in the procedure for different seeds.