## SLOVENSKI STANDARD

SIST ISO 5555 prva izdaja junij 1995

## Rastlinske in živalske maščobe in olja - Vzorčenje (prevzet standard ISO 5555:1991 z metodo platnice)

Animal and vegetable fats and oils - Sampling

Corps gras d'origines animale et végétale p Échantillonnage (standards.iteh.ai)

<u>SIST ISO 5555:1995</u> https://standards.iteh.ai/catalog/standards/sist/27c78d59-651c-4291-9002-d8ec9490687e/sist-iso-5555-1995

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### UVOD

Standard SIST ISO 5555, Rastlinske in živalske maščobe in olja - Vzorčenje, prva izdaja, 1995, ima status slovenskega standarda in je z metodo platnice prevzet mednarodni standard ISO 5555, Animal and vegetable fats and oils - Sampling, second edition, 1991-10-01.

#### **PREDGOVOR**

Mednarodni standard ISO 5555:1991 je pripravil tehnični odbor Mednarodne organizacije za standardizacijo ISO/TC 34 Kmetijski pridelki in živilski proizvodi.

Odločitev za prevzem tega standarda po metodi platnice je sprejela delovna skupina WG 2 Oljnice ter rastlinske in živalske maščobe in olja v okviru tehničnega odbora USM/TC Kmetijski pridelki in živilski proizvodi.

Ta slovenski standard je dne 1995-06-16 odobril direktor USM.

### **ZVEZA S STANDARDI**

Ta standard skupaj z naslednjimi slovenskimi standardi, prevzetimi mednarodnimi standardi ISO, ureja kontrolo kakovosti oljnic ter rastlinskih in živalskih maščob in olj:

SIST ISO 542 (en)	Oljnice - Vzorčenje
SIST ISO 658 (en)	Oljnice - Določanje vsebnosti nečistoč
SIST ISO 659 (en)	Oljnice - Določanje heksanskega (ali petroleterskega) ekstrakta, imenovanega "vsebnost olja"
SIST ISO 661 (en)	Rastlinske in čivalske maščobe in olja - Priprava preskusnega
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SIST ISO 664 (en)	d8ec9490687e/sist-iso-5555-1995 Oljnice - Zmanjšanje laboratorijskega vzorca na preskusni vzorec
SIST ISO 665 (en)	Oljnice - Določanje vsebnosti vlage in hlapnih snovi
SIST ISO 729 (en)	Oljnice - Določanje kislosti olja
SIST ISO 5508 (en)	Rastlinske in živalske maščobe in olja - Določanje sestave maščobnih kislin z metodo plinske kromatografije
SIST ISO 5509 (en)	Rastlinske in živalske maščobe in olja - Priprava metil strov maščobnih kislin

### OSNOVA ZA IZDAJO STANDARDA

- Prevzem standarda ISO 5555:1991.
- Ta slovenski standard pokriva področje JUS E.K8.020:91.

## **OPOMBI**

- Povsod, kjer se v besedilu standarda uporablja izraz "mednarodni standard", to pomeni v SIST ISO 5555:1995 "slovenski standard".
- Uvod in predgovor nista sestavni del standarda.

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Po mnenju Ministrstva za informiranje Republike Slovenije z dne 18. februarja 1992, štev. 23/96-92, spada ta publikacija med proizvode informativne narave iz 13. točke tarifne številke 3, za katere se plačuje 5-odstotni prometni davek.

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# INTERNATIONAL STANDARD

ISO 5555

Second edition 1991-10-01

## Animal and vegetable fats and oils — Sampling

Corps gras d'origines animale et végétale — Échantillonnage iTeh STANDARD PREVIEW (standards.iteh.ai)

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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.

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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International Standard ISO 5555 was prepared by Technical Committee ISO/TC 34, Agricultural food products, Sub-Committee SC 11, Animal and vegetable fats and oils.

This second edition cancels and replaces the first edition (ISO 5555:1983), which has been technically revised gestandards/sist/27c/8d59-651c-4291-9002-d8ec9490687e/sist-iso-5555-1995

Annexes A, B and C of this International Standard are for information only.

## Introduction

Practically all fats are marketed on the basis of the result of analysis of a sample of the fat. Disputes are invariably settled by reference to this sample. Therefore careless or inaccurate sampling could lead to misunderstandings, delays and unwarranted financial adjustments.

Correct sampling is a difficult procedure and one that requires the most careful attention. Emphasis cannot therefore be too strongly laid on the necessity of obtaining properly representative samples for analysis.

The sampling procedures given in this International Standard are recognized as good practice and it is strongly recommended that they be followed whenever practicable. It is recognized that it is difficult to lay down fixed rules which can be followed in every case; particular circumstances may render desirable some modification of the methods specified.

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## Animal and vegetable fats and oils — Sampling

## 1 Scope

This International Standard describes methods of sampling crude or processed animal and vegetable fats and oils, referred to as fats hereafter whatever the origin and whether liquid or solid. It also describes the apparatus used for this process.

NOTE 1 Methods of sampling milk and milk products, including milk fats, are specified in ISO 707.

#### 3 General

The object of sampling and of preparing samples is to obtain from a consignment (which may be in lots) a manageable quantity of the fat, the properties of which correspond as closely as possible to the properties of the consignment sampled.

The methods of taking samples described below are intended for the guidance of experts and can be used for

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## 2 Definitions

a) consignments in bulk, e.g. in land tanks, ships' (standards.ite tanks, tank wagons and tank cars; and

b) consignments consisting of a number of pack-following definitions applys://standards.iteh.ai/catalog/standards/sist/27c766fffes/51c-4291-9002-d8ec9490687e/sist-iso-5555-1995

- **2.1 consignment:** The quantity of fat delivered at one time and covered by a particular contract or shipping document. It may be composed of one or more lots or parts of lots.
- 2.2 lot: An identified quantity of fat, presumed to be of uniform characteristics.
- **2.3 increment:** A quantity of fat taken at one time from one place in a lot.
- **2.4 bulk sample:** The quantity of fat obtained by combining the various increments from a lot in amounts proportional to the quantities they represent.
- NOTE 2 The bulk sample should be representative of the lot and take account of any contractual requirements.
- 2.5 laboratory sample: The quantity of fat, obtained from the bulk sample after suitable homogenization and reduction in size, which is representative of the lot and intended for laboratory examination.
- 2.6 conventional mass per volume sample; "litre weight in air" sample: The quantity of fat taken for the mass of fat to be calculated from the volume.

## 4 Apparatus

### 4.1 General

For a particular purpose, the choice of sampling instruments and their suitability depend on the skill of the sampler in following the recommended procedures.

In all circumstances, it shall be borne in mind whether the sample is intended for preliminary inspection, for analysis, or for the determination of conventional mass per volume ("litre weight in air").

#### 4.2 Materials

Sampling instruments, ancillary apparatus and sample containers (including caps) shall be made of materials which are chemically inert to the fat being sampled and they shall not catalyse chemical reactions.

For sampling instruments, stainless steel is the most suitable material. Aluminium may be used only when the acidity is low but not for the storage of samples.

Plastics, copper and copper alloys shall not be used nor any toxic material.

WARNING — If glass apparatus is used for a particular reason, great care shall be taken to avoid breakages.

## 4.3 Examples of types of sampling instruments

#### 4.3.1 General

Many forms and types of sampling instruments exist. and the instruments described in this International Standard are only examples of those commonly used.

The instruments are all simple, robust and easily cleaned. They can be used for all the sampling operations described in this International Standard with all types of fats commonly found in commerce.

Certain basic requirements are common to all sampling instruments; e.g. they shall be capable of taking a representative sample from a required level or area and of preserving the integrity of the sample until it can be transferred to a sample container. Ease of cleaning, practical size and ability to with 12 stand rough usage are other essential characteristics.

scribed in this International Standard may be \$1858 et 90687e e.g. to meet the needs of individual users.

The instruments can be of various sizes according to the quantity of sample required and the accessibility of the fat.

The types of apparatus mentioned in 4.3.2, 4.4.1. 4.4.2 and 4.4.5 are described in annex B.

### 4.3.2 Sampling instruments

- 4.3.2.1 Simple weighted sample can, see B.1 and figure B.1.
- 4.3.2.2 Weighted cage for sample bottle, see B.2 and figure B.2.
- 4.3.2.3 Valve sampling cylinder (sinker sampler), see B.3 and figure B.3.
- 4.3.2.4 Bottom samplers, see B.4 and figure B.4.
- 4.3.2.5 Sampling tubes, see B.5 and figure B.5.

- 4.3.2.6 Sampling scoops, see B.6 and figure B.6.
- 4.4 Ancillary apparatus
- 4.4.1 Water-finding rule, see B.7 and figure B.7.
- 4.4.2 Ullage rule, see B.8 and figure B.8.
- 4.4.3 Labels, adhesive or tie-on and sealing apparatus, see also clause 7.
- 4.4.4 Thermometers.
- 4.4.5 Measuring tape and weight, see B.9.
- 4.5 Sample containers
- 4.5.1 Sample containers, made of the materials specified in 4.2.

NOTE 3 Glass containers are recommended.

## Sampling technique

- **5.1** All sampling operations shall be performed by an operator with clean hands or wearing gloves (clean plastics or cotton gloves may be used). ds.iten.ai
- 5.2 The apparatus and sample containers shall be SIST ISCClean land dry prior to initial use. During the sam-Alternative designs of instruments indood those i/cdelog/standards is instruments indood those i/cdelog/standards is instruments in the same sampling apparatus may be used provided that it is adequately flushed with the fat to be sampled to ensure that none of the previous sample remains.
  - 5.3 Sampling shall be carried out in such a manner as to protect the samples, the fat being sampled, the sampling instruments and the sample containers from adventitious contamination with rain, dust, etc.
  - **5.4** All extraneous material shall be removed from the outside of the sampling instruments before the instruments are emptied.
  - 5.5 If heating is necessary to facilitate sampling, it is important that fats are not overheated. It is recommended, in accordance with usual practice, that the temperature of a bulk of fat in a storage tank should not be raised by more than 5 °C per day.

The area of heating coils should be large in relation to the volume of fat and their temperature kept as low as possible to avoid local overheating. Steam, at a maximum pressure of 150 kPa (1,5 bar) gauge reading (128 °C) or hot water (only if the heating coils are self-draining) should be used. Care is required to prevent contamination of the fat by steam or water.