
**Milk and milk products — Specification
of Mojonner-type fat extraction flasks**

*Lait et produits laitiers — Spécifications des fioles d'extraction
de la matière grasse, type Mojonner*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 3889:2006](https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006)

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>



Reference numbers
ISO 3889:2006(E)
IDF 219:2006(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. Neither the ISO Central Secretariat nor the IDF accepts any liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies and IDF national committees. In the unlikely event that a problem relating to it is found, please inform the ISO Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 3889:2006](#)

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>

© ISO and IDF 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO or IDF at the respective address below.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

International Dairy Federation
Diamant Building • Boulevard Auguste Reyers 80 • B-1030 Brussels
Tel. + 32 2 733 98 88
Fax + 32 2 733 04 13
E-mail info@fil-idf.org
Web www.fil-idf.org

Published in Switzerland

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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 3889|IDF 219 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF). It is being published jointly by ISO and IDF.

iTeh STANDARD PREVIEW

This edition of ISO 3889|IDF 219 ~~(cancels and replaces ISO 3889:1977, of which it constitutes a minor revision.~~

[ISO 3889:2006](https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006)

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>

Foreword

IDF (the International Dairy Federation) is a worldwide federation of the dairy sector with a National Committee in every member country. Every National Committee has the right to be represented on the IDF Standing Committees carrying out the technical work. IDF collaborates with ISO in the development of standard methods of analysis and sampling for milk and milk products.

Draft International Standards adopted by the Action Teams and Standing Committees are circulated to the National Committees for voting. Publication as an International Standard requires approval by at least 50 % of the IDF National Committees casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. IDF shall not be held responsible for identifying any or all such patent rights.

ISO 3889|IDF 219 was prepared by the International Dairy Federation (IDF) and Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*. It is being published jointly by IDF and ISO.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 3889:2006](https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006)

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>

Milk and milk products — Specification of Mojonnier-type fat extraction flasks

1 Scope

This International Standard specifies the characteristics of Mojonnier-type fat extraction flasks for use in gravimetric methods for the determination of fat in milk and milk products. The flasks are designed to enable a supernatant solvent layer to be decanted almost completely from an underlying aqueous layer.

NOTE The flasks are suitable for use with the methods described in ISO 1211, ISO 1735, ISO 1736, ISO 1737, ISO 1854, ISO 2450 and ISO 5543.

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 4803, *Laboratory glassware — Borosilicate glass tubing*

3 Material

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>

The flasks shall be made from clear borosilicate glass, 1,4 mm ± 0,2 mm in thickness, and as free as possible from visible defects.

The glass tubing described in ISO 4803 is suitable.

4 Construction

The join in the glass of the stem shall be as free as possible from striations, and its plane shall be positioned perpendicular to the axis of the stem, so that during use of the flask the interface between the aqueous and solvent layers is not obscured.

Experience has shown that it is preferable for the join to be nearer to the lower bulb than to the upper bulb.

5 Form

5.1 Figure 1 illustrates three permissible forms of flask (forms A, B and C), each complying with the dimensional requirements of Clause 6 and known to be suitable. Variants of these forms will also comply with the requirements of this International Standard provided that the flasks meet the requirements of 5.2 and Clauses 3, 4 and 6.

5.2 The neck of the flask shall have either a pouring rim or a pouring spout, and shall be circular in cross-section to allow tight closure with a stopper.

NOTE Flasks with a spherical lower bulb (forms B and C) are particularly suitable for direct heating over a flame (for example as described in ISO 1735).

6 Dimensions

6.1 General

The dimensions of the flasks shall comply with the requirements listed in Table 1 for form A, B or C (as appropriate).

NOTE These requirements have been chosen to allow the use of glass tubing complying with ISO 4803. The tolerances are sufficient to allow the manufacture of flasks that can be accommodated in the various types of centrifuge commonly used to spin these flasks. Some centrifuge buckets, however, will not accommodate flasks whose upper or lower bulb external diameter exceeds 36,5 mm.

6.2 Capacity of lower bulb and stem

The capacity of the lower bulb and stem (see Table 1) shall be determined by the maximum volume of liquid contained in the flask when the axis of the upper bulb is horizontal and the neck inclined downwards.

6.3 Guidance for manufacturers

The dimensions in Table 2 are in common use and are included in this International Standard only as guidance to manufacturers.

Table 1 — Dimensional requirements

Item	Forms A and B	Form C
Lower bulb diameter (external)	35,0 mm ± 1,8 mm	35,0 mm ± 1,8 mm
Lower bulb and stem capacity	24 ml ± 2 ml	24 ml ± 2 ml
Stem diameter (external)	16 mm ± 1 mm	16 mm ± 1 mm
Upper bulb diameter (external)	35,0 mm ± 1,8 mm	35,0 mm ± 1,8 mm
Neck diameter (external)	18,0 mm ± 0,5 mm	18,0 mm ± 0,5 mm
Angles		
— between lower bulb and upper bulb	112° ± 3°	128° ± 3°
— between upper bulb and neck	160° ± 10°	160° ± 10°
Overall length (measured parallel to the axis of the upper bulb)	185 mm ± 15 mm	185 mm ± 15 mm

Table 2 — Guidance on additional dimensions

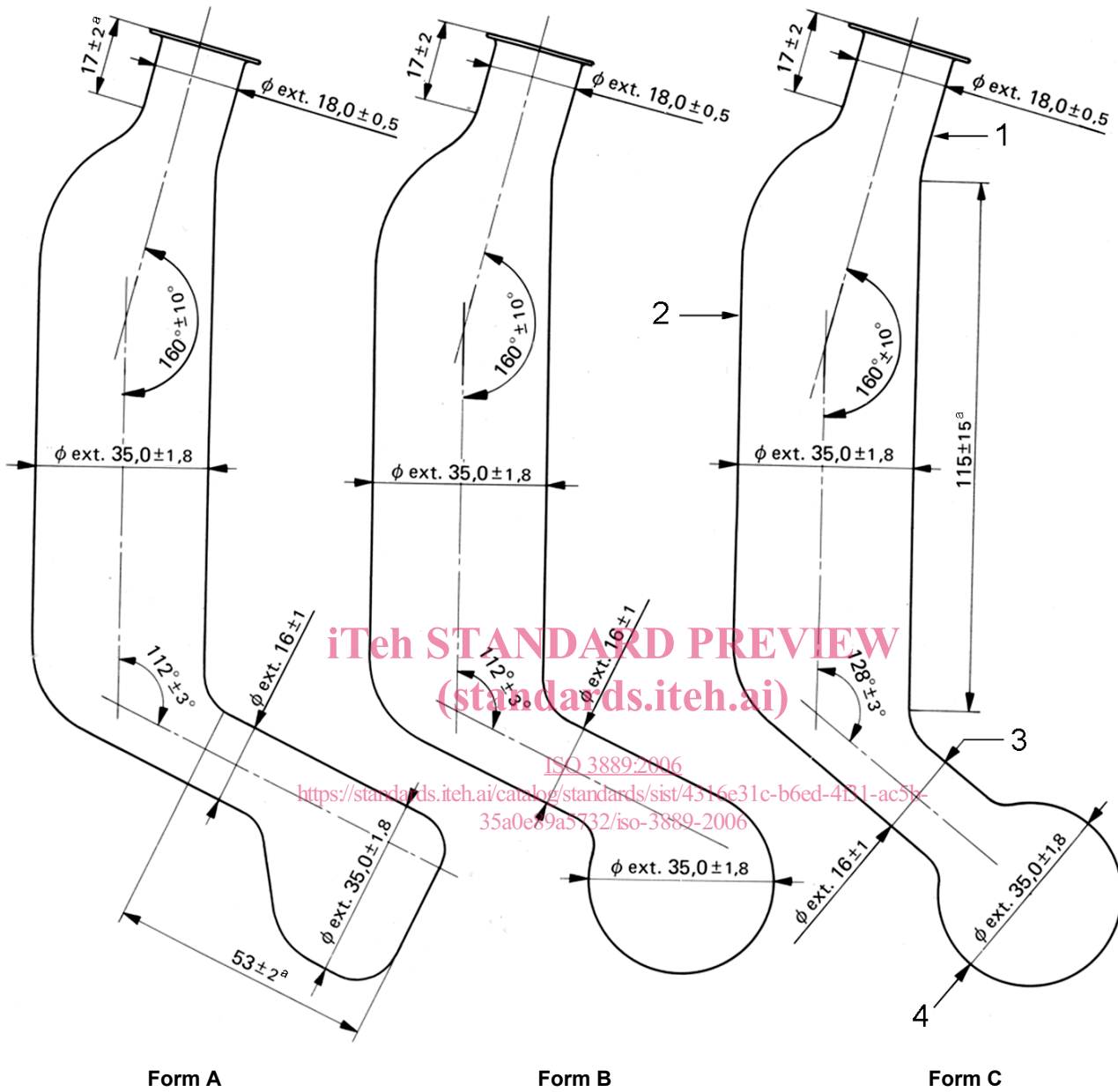
Item	Forms A and B	Form C
<i>Lower bulb and stem</i> length	53 mm ± 2 mm	53 mm ± 2 mm
<i>Upper bulb</i> — length	115 mm ± 15 mm	115 mm ± 15 mm
— capacity [i.e. the difference between the capacity of the lower bulb and stem (see 6.2) and the total capacity of the stoppered flask]	100 ml ± 10 ml	100 ml ± 10 ml
<i>Neck</i> length	17 mm ± 2 mm	17 mm ± 2 mm

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3889:2006

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>

Linear dimensions in millimetres



Key

- 1 neck
- 2 upper bulb
- 3 stem
- 4 lower bulb

^a These dimensions, common to all three forms, are shown for guidance only.

NOTE Overall length is 185 mm ± 15 mm.

Figure 1 — Mojonnier-type fat extraction flasks: Three alternative forms

Bibliography

- [1] ISO 1211, *Milk — Determination of fat content — Gravimetric method (Reference method)*
- [2] ISO 1735|IDF 5, *Cheese and processed cheese products — Determination of fat content — Gravimetric method (Reference method)*
- [3] ISO 1736, *Dried milk and dried milk products — Determination of fat content — Gravimetric method (Reference method)*
- [4] ISO 1737, *Evaporated milk and sweetened condensed milk — Determination of fat content — Gravimetric method (Reference method)*
- [5] ISO 1854, *Whey cheese — Determination of fat content — Gravimetric method (Reference method)*
- [6] ISO 2450, *Cream — Determination of fat content — Gravimetric method (Reference method)*
- [7] ISO 5543, *Caseins and caseinates — Determination of fat content — Gravimetric method (Reference method)*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 3889:2006](https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006)

<https://standards.iteh.ai/catalog/standards/sist/4316e31c-b6ed-4f31-ac5b-35a0e89a5732/iso-3889-2006>