
**Microbiology of the food chain —
Preparation of test samples, initial
suspension and decimal dilutions for
microbiological examination —**

**Part 3:
Specific rules for the preparation of
fish and fishery products**

*Microbiologie de la chaîne alimentaire — Préparation des
échantillons, de la suspension mère et des dilutions décimales en vue
de l'examen microbiologique —*

Partie 3: Règles spécifiques pour la préparation des produits de la pêche



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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.

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This second edition cancels and replaces the first edition (ISO 6887-3:2003), which has been technically revised.

A list of all parts in the ISO 6887 series can be found on the ISO website.

Microbiology of the food chain — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination —

Part 3: Specific rules for the preparation of fish and fishery products

WARNING — The use of this document may involve hazardous materials, operations and equipment. It is the responsibility of the user of this document to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before use.

1 Scope

This document specifies rules for the preparation of fish and fishery product samples and their suspension for microbiological examination when the samples require a different preparation from the methods described in ISO 6887-1. ISO 6887-1 defines the general rules for the preparation of the initial suspension and dilutions for microbiological examination.

This document includes special procedures for sampling raw molluscs, tunicates and echinoderms from primary production areas.

NOTE 1 Sampling of raw molluscs, tunicates and echinoderms from primary production areas is included in this document, rather than ISO 13307, which specifies rules for sampling from the terrestrial primary production stage.

This document excludes preparation of samples for both enumeration and detection test methods where preparation details are specified in the relevant International Standards (e.g. ISO/TS 15216-1 and ISO/TS 15216-2 for determination of hepatitis A virus and norovirus in food using real-time RT-PCR).

This document is intended to be used in conjunction with ISO 6887-1. It is applicable to the following raw, processed or frozen fish and shellfish and their products (see [Annex A](#) for classification of major taxa):

- a) Raw fishery products, molluscs, tunicates and echinoderms including:
 - whole fish or fillets, with or without skin and heads, and gutted;
 - crustaceans, whole or shelled;
 - cephalopods;
 - bivalve molluscs;
 - gastropods;
 - tunicates and echinoderms.
- b) Processed products including:
 - smoked fish, whole or prepared fillets, with or without skin;
 - cooked or partially cooked, whole or shelled crustaceans, molluscs, tunicates and echinoderms;
 - cooked or partially cooked fish and fish-based multi-component products.

- c) Raw or cooked frozen fish, crustaceans, molluscs and others, in blocks or otherwise, including:
- fish, fish fillets and pieces;
 - whole and shelled crustacean (e.g. flaked crab, prawns), molluscs, tunicates and echinoderms.

NOTE 2 The purpose of examinations performed on these samples can be either hygiene testing or quality control. However, the sampling techniques described in this document relate mainly to hygiene testing (on muscle tissues).

2 Normative references

The following documents are referred to in text in such a way that some or all of their content constitutes requirements 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 6887-1, *Microbiology of the food chain — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 1: General rules for the preparation of the initial suspension and decimal dilutions*

ISO 7218, *Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6887-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Principle

The general principles for sample preparation and subsequent steps are described in ISO 6887-1. This document describes specific measures for fish and fishery products, including raw, processed and frozen products.

5 Diluents

Diluents for general use and special purposes are described in ISO 6887-1 and there are no additional specific requirements for fish and fishery products.

6 Apparatus

Usual microbiological laboratory equipment for general use (ISO 7218 and ISO 6887-1) and in particular, the following:

6.1 Homogenizer.

6.1.1 Rotary homogenizer (blender), as specified in ISO 7218, but if a large test portion is used, the equipment should include a 1 l bowl.

6.1.2 Peristaltic homogenizer, as specified in ISO 7218.