

Second edition  
2021-08

---

---

**Microbiology of the food chain —  
Horizontal method for the  
enumeration of coagulase-positive  
staphylococci (*Staphylococcus aureus*  
and other species) —**

**Part 2:  
Method using rabbit plasma  
fibrinogen agar medium**

*Microbiologie de la chaîne alimentaire — Méthode horizontale  
pour le dénombrement des staphylocoques à coagulase positive  
(*Staphylococcus aureus* et autres espèces) —*

*Partie 2: Méthode utilisant le milieu gélosé au plasma de lapin et au  
fibrinogène*



Reference number  
ISO 6888-2:2021(E)

© ISO 2021



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 6888-2:2021". Click here to purchase the full version from the ANSI store.

## Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>2</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Principle</b> .....	<b>2</b>
4.1 General.....	2
4.2 Incubation.....	2
4.3 Enumeration.....	3
<b>5 Culture media and reagents</b> .....	<b>3</b>
<b>6 Equipment and consumables</b> .....	<b>3</b>
<b>7 Sampling</b> .....	<b>4</b>
<b>8 Preparation of the test sample</b> .....	<b>4</b>
<b>9 Procedure (see <a href="#">Figure A.1</a>)</b> .....	<b>4</b>
9.1 Test portion, initial suspension and dilutions.....	4
9.2 Inoculation and incubation.....	4
9.3 Counting of colonies.....	5
9.3.1 General description of colonies growing on RPFA medium.....	5
9.3.2 Colony counting procedure.....	5
<b>10 Expression of results</b> .....	<b>5</b>
<b>11 Performance characteristics of the method</b> .....	<b>5</b>
11.1 Interlaboratory study.....	5
11.2 Repeatability limit.....	5
11.3 Reproducibility limit.....	6
<b>12 Test report</b> .....	<b>7</b>
<b>13 Quality assurance</b> .....	<b>7</b>
<b>Annex A (normative) Flow diagram of the procedure</b> .....	<b>8</b>
<b>Annex B (normative) Culture media and reagents</b> .....	<b>9</b>
<b>Annex C (informative) Results of the interlaboratory study</b> .....	<b>12</b>
<b>Bibliography</b> .....	<b>14</b>

## 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](http://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](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 463, *Microbiology of the food chain*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 6888-2:1999), which has been technically revised. It also incorporates the Amendment ISO 6888-2:1999/Amd 1:2003. The main changes compared with the previous edition are as follows:

- the title has been changed to relate to the “food chain”;
- the status of ISO 6888-1 and this document has been clarified;
- the document has been aligned with ISO 7218:2007, i.e. and pour molten agar medium at 44 °C to 47 °C;
- all occurrences, when appropriate, have been changed from “35 °C or 37 °C” to “34 °C to 38 °C”;
- all occurrences of incubation time, when appropriate, have been changed from “18 h to 24 h” to “24 h ± 2 h”;
- requirements have been added to use ISO 11133;
- all available standards related to sampling techniques have been updated;
- flow diagram procedure in [Annex A](#) has been updated;
- culture media and reagents with performance testing have been added and moved to [Annex B](#);
- performance testing for rabbit plasma fibrinogen agar (RPFA) medium has been added;
- results of the interlaboratory study (from ISO 6888-2:1999/Amendment 1:2003 Precision data) have been updated;

This is a preview of "ISO 6888-2:2021". [Click here to purchase the full version from the ANSI store.](#)

— the Bibliography has been updated.

A list of all parts in the ISO 6888 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](http://www.iso.org/members.html).

## Introduction

ISO 6888-1, this document and ISO 6888-3 describe three horizontal methods for the detection and enumeration of coagulase-positive staphylococci among which enterotoxinogenic strains are encountered. It is mainly concerned with *Staphylococcus aureus*, but also with *S. intermedius* and certain strains of *S. hyicus*.

For the purposes of this document, the characterization of staphylococci is based on a positive coagulase reaction, but it is recognized that some strains of *Staphylococcus aureus* give weakly positive coagulase reactions. These latter strains can be confused with other bacteria but they can be distinguished by the use of additional tests not included in this document, such as tests for sensitivity to lysostaphin, and for production of haemolysin, thermostable nuclease and acid from mannitol (see ISO 7218 and Reference [13]).

The main technical changes listed in the Foreword, introduced in this document compared with the previous edition, are considered as minor (see ISO 17468). They have a minor impact on the performance characteristics of the method.

The results of the interlaboratory study and samples tested are described in [Annex C](#).