

STN	Mikrobiológia potravinárskeho reťazca Horizontálna metóda na dôkaz, stanovenie počtu a sérotypizáciu baktérií rodu <i>Salmonella</i> Časť 4: Identifikácia monofázickej <i>Salmonella</i> <i>Typhimurium</i> (1,4,[5],12:i:-) pomocou polymerázovej reťazovej reakcie (PCR) (ISO 6579-4: 2025)	STN EN ISO 6579-4 56 0088
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Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of Salmonella - Part 4: Identification of monophasic Salmonella Typhimurium (1,4,[5],12:i:-) by polymerase chain reaction (PCR) (ISO 6579-4:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/25

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EN ISO 6579-4

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English Version

Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of Salmonella - Part 4: Identification of monophasic Salmonella Typhimurium (1,4,[5],12:i:-) by polymerase chain reaction (PCR) (ISO 6579-4:2025)

Microbiologie de la chaîne alimentaire - Méthode horizontale pour la recherche, le dénombrement et le sérotypage des Salmonella - Partie 4: Identification du variant monophasique de Salmonella Typhimurium (1,4,[5],12:i:-) par réaction de polymérisation en chaîne (PCR) (ISO 6579-4:2025)

Mikrobiologie der Lebensmittelkette - Horizontales Verfahren zum Nachweis, zur Zählung und zur Serotypisierung von Salmonellen - Teil 4: Identifizierung von monophasischen Salmonella Typhimurium (1,4,[5],12:i:-) durch Polymerase-Kettenreaktion (PCR) (ISO 6579-4:2025)

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EN ISO 6579-4:2025 (E)

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European foreword

This document (EN ISO 6579-4:2025) has been prepared by Technical Committee ISO/TC 34 "Food products" in collaboration with Technical Committee CEN/TC 463 "Microbiology of the food chain" the secretariat of which is held by AFNOR.

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International Standard

ISO 6579-4

Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of *Salmonella* —

Part 4:

Identification of monophasic *Salmonella* Typhimurium (1,4,[5],12:i:-) by polymerase chain reaction (PCR)

*Microbiologie de la chaîne alimentaire — Méthode horizontale
pour la recherche, le dénombrement et le sérotypage des
Salmonella —*

*Partie 4: Identification du variant monophasique de
Salmonella Typhimurium (1,4,[5],12:i:-) par réaction de
polymérisation en chaîne (PCR)*

**First edition
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ISO 6579-4:2025(en)**Foreword**

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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).

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ISO 6579-4:2025(en)**Introduction**

In several international, regional and national laws, regulatory limits are set to ensure the so-called “absence” of *Salmonella* spp. in samples of the food chain. Moreover, several European Commission (EC) regulations also demand the absence of particular *Salmonella* serovars which have shown to cause a relatively high percentage of human salmonellosis. One of these *Salmonella* serovars for which legal criteria are set is *Salmonella* Typhimurium, including its monophasic variant 1,4,[5],12:i:- (e.g. Regulation (EC) No. 1086/2011^[10]). Hence, it is important to know that a serovar found with antigenic formula 1,4,[5],12:i:- is indeed the monophasic variant of *Salmonella* Typhimurium (1,4,[5],12:i:1,2) and not the monophasic variant of another *Salmonella* (*S.*) serovar for which no criteria are set, such as *S.* Lagos (1,4,[5],12:i:1,5), *S.* Agama (4,12:i:1,6), *S.* Farsta (4,[5],12:i:e,n,x), *S.* Tsevie (1,4,12:i:e,n,z₁₅), *S.* Gloucester (1,4,12,27:i:l,w) or *S.* Tumodi (1,4,12:i:z₆). Confirmational distinction between *Salmonella* Typhimurium and *Salmonella* non-Typhimurium serovars can be determined using molecular analysis, such as the PCR technique(s) described in this document.

ISO 6579-4:2025(en)**2 Normative references**

The following documents are referred to in the 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 7218, *Microbiology of the food chain — General requirements and guidance for microbiological examinations*

ISO 11133, *Microbiology of food, animal feed and water — Preparation, production, storage and performance testing of culture media*

ISO 20836, *Microbiology of the food chain — Polymerase chain reaction (PCR) for the detection of microorganisms — Thermal performance testing of thermal cyclers*

ISO 22174, *Microbiology of the food chain — Polymerase chain reaction (PCR) for the detection and quantification of microorganisms — General requirements and definitions*

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