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**Water quality — Determination of  
individual isomers of nonylphenol —  
Method using solid phase extraction  
(SPE) and gas chromatography/mass  
spectrometry (GC/MS)**

*Qualité de l'eau — Détermination des isomères individuels de  
nonylphénol — Méthode par extraction en phase solide (SPE) et  
chromatographie en phase gazeuse/spectrométrie de masse (GC/MS)*



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## Foreword

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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 24293 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical and biochemical methods*.

## Introduction

The user should be aware that particular problems could require the specifications of additional marginal conditions.

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# Water quality — Determination of individual isomers of nonylphenol — Method using solid phase extraction (SPE) and gas chromatography/mass spectrometry (GC/MS)

**WARNING** — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

**IMPORTANT** — It is absolutely essential that tests conducted in accordance with this International Standard be carried out by suitably qualified staff.

## 1 Scope

This International Standard specifies a method for the determination of selected individual isomers of nonylphenol in non-filtered samples of drinking water, waste water, ground water and surface water. The method is applicable in concentrations between 0,001 µg/l and 0,1 µg/l for individual isomers and from 0,01 µg/l to 0,2 µg/l for the sum of 4-nonylphenol (mixture of isomers). Depending on the matrix, the method is also applicable to waste water in concentrations between 0,1 µg/l and 50 µg/l.

## 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 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 5667-1, *Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques*

ISO 8466-1, *Water quality — Calibration and evaluation of analytical methods and estimation of performance characteristics — Part 1: Statistical evaluation of the linear calibration function*