



NSAI
Standards

Irish Standard
I.S. EN ISO 5667-3:2012

Water quality - Sampling - Part 3: Preservation and handling of water samples (ISO 5667-3:2012)

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I.S. EN ISO 5667-3:2012

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English Version

**Water quality - Sampling - Part 3: Preservation and handling of
water samples (ISO 5667-3:2012)**

Qualité de l'eau - Échantillonnage - Partie 3: Conservation
et manipulation des échantillons d'eau (ISO 5667-3:2012)

Wasserbeschaffenheit - Probenahme - Teil 3:
Konservierung und Handhabung von Wasserproben (ISO
5667-3:2012)

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Contents

Page

| | |
|----------------------|----------|
| Foreword..... | 3 |
|----------------------|----------|

Foreword

This document (EN ISO 5667-3:2012) has been prepared by Technical Committee ISO/TC 147 "Water quality" in collaboration with Technical Committee CEN/TC 230 "Water analysis" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2013, and conflicting national standards shall be withdrawn at the latest by May 2013.

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

This document supersedes EN ISO 5667-3:2003.

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Endorsement notice

The text of ISO 5667-3:2012 has been approved by CEN as a EN ISO 5667-3:2012 without any modification.

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I.S. EN ISO 5667-3:2012
INTERNATIONAL
STANDARD

ISO
5667-3

Fourth edition
2012-11-15

Water quality — Sampling —
Part 3:
Preservation and handling of water
samples

Qualité de l'eau — Échantillonnage —

Partie 3: Conservation et la manipulation des échantillons d'eau



Reference number
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Contents

Page

| | |
|---|-----------|
| Foreword | iv |
| Introduction | vi |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Sampling and chain of custody | 2 |
| 5 Reagents and materials | 2 |
| 5.1 Solids..... | 3 |
| 5.2 Solutions..... | 3 |
| 5.3 Materials..... | 4 |
| 6 Containers | 4 |
| 6.1 Container selection and preparation..... | 4 |
| 6.2 Filtration on site..... | 5 |
| 6.3 Filling the container..... | 5 |
| 7 Sample handling and preservation | 5 |
| 7.1 Sample handling and preservation for physical and chemical examination..... | 5 |
| 7.2 Sample handling and preservation for biological examination..... | 6 |
| 7.3 Sample handling and preservation for radiochemical analysis..... | 6 |
| 8 Sample transport | 7 |
| 9 Identification of samples | 7 |
| 10 Sample reception | 8 |
| 11 Sample storage | 8 |
| Annex A (informative) Techniques for sample preservation | 9 |
| Annex B (informative) Container preparation | 35 |
| Annex C (informative) Protocol as used in Dutch validation studies | 36 |
| Bibliography | 38 |

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.

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ISO 5667-3 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*.

This fourth edition cancels and replaces the third edition (ISO 5667-3:2003), which has been technically revised.

ISO 5667 consists of the following parts, under the general title *Water quality — Sampling*:

- *Part 1: Guidance on the design of sampling programmes and sampling techniques*
- *Part 3: Preservation and handling of water samples*
- *Part 4: Guidance on sampling from lakes, natural and man-made*
- *Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems*
- *Part 6: Guidance on sampling of rivers and streams*
- *Part 7: Guidance on sampling of water and steam in boiler plants*
- *Part 8: Guidance on the sampling of wet deposition*
- *Part 9: Guidance on sampling from marine waters*
- *Part 10: Guidance on sampling of waste waters*
- *Part 11: Guidance on sampling of groundwaters*
- *Part 12: Guidance on sampling of bottom sediments*
- *Part 13: Guidance on sampling of sludges*
- *Part 14: Guidance on quality assurance of environmental water-sampling and handling*
- *Part 15: Guidance on the preservation and handling of sludge and sediment samples*
- *Part 16: Guidance on biotesting of samples*
- *Part 17: Guidance on sampling of bulk suspended solids*
- *Part 19: Guidance on sampling of marine sediments*

- *Part 20: Guidance on the use of sampling data for decision making — Compliance with thresholds and classification systems*
- *Part 21: Guidance on sampling of drinking water distributed by tankers or means other than distribution pipes*
- *Part 22: Guidance on the design and installation of groundwater monitoring points*
- *Part 23: Guidance on passive sampling in surface waters*

Introduction

This part of ISO 5667 is intended to be used in conjunction with ISO 5667-1, which deals with the design of sampling programmes and sampling techniques.

Where possible this part of ISO 5667 has been brought into line with current standards. Where new research or validation results have provided new insights, the latest knowledge has been used.

Guidance on validation protocols can be found in ISO Guide 34.^[63]

Water quality — Sampling —

Part 3: Preservation and handling of water samples

NOTICE — This part of ISO 5667 and the analytical International Standards listed in Annex A are complementary. Where no analytical International Standard is applicable, the technique(s) described in Tables A.1 to A.3 take(s) normative status.

When new or revised analytical standards are developed with storage times or preservative techniques differing from those in Tables A.1 to A.3, then the storage times or preservative techniques should be validated and presented to ISO/TC 147/SC 6/WG 3 for incorporation into the next revision of this part of ISO 5667.

1 Scope

This part of ISO 5667 establishes general requirements for sampling, preservation, handling, transport and storage of all water samples including those for biological analyses. It is not applicable to water samples intended for microbiological analyses as specified in ISO 19458, ecotoxicological assays, biological assays, and passive sampling as specified in the scope of ISO 5667-23.

This part of ISO 5667 is particularly appropriate when spot or composite samples cannot be analysed on site and have to be transported to a laboratory for analysis.

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 (all parts), *Water quality — Sampling*

ISO 19458, *Water quality — Sampling for microbiological analysis*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

integrity

property that the parameter(s) of interest, information or content of the sample container has not been altered or lost in an unauthorized manner or subject to loss of representativeness

3.2

sample preservation

any procedure used to stabilize a sample in such a way that the properties under examination are maintained stable from the collection step until preparation for analysis

[ISO 11074:2005,^[29] 4.4.20]

NOTE Different analytes may require several samples from the same source that are stabilized by different procedures.

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