

ISO/TS 21231:2019 (E)

Water quality — Characterization of analytical methods — Guidelines for the selection of a representative matrix

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Influence parameters
5.1	Common parameters for all matrices
5.2	Water intended for consumption
5.3	Natural waters
5.4	Waste waters
5.5	Marine waters
5.6	Recreational waters
6	Selection of characteristic parameters of a matrix
6.1	General
6.2	All waters
6.3	Waters intended for consumption
6.4	Natural waters
6.5	Waste waters
6.6	Marine waters
6.7	Recreational waters
7	Available materials
7.1	General
7.2	Material obtained by reasonable dilution of a real matrix
7.3	Artificial material
7.4	Analyte-specific blank values in matrices
8	Report
Annex A	(informative) Characterization of waters intended for human consumption and mineral waters
Annex B	(informative) Examples of preparation of artificial matrices and representative characteristics
B.1	Overview
B.2	Equipment
B.3	Reagents
B.4	Marine waters
B.4.1	General
B.4.2	Stock solutions
B.4.2.1	Stock solution No. 1
B.4.2.2	Stock solution No. 2
B.4.2.3	Stock solution No. 3
B.4.3	Preparation
B.4.3.1	Artificial marine water[7], [10]
B.4.3.2	Heavy metal-enriched artificial marine water[11]
B.4.3.3	Artificial marine water as per Kester[15]

- B.4.3.4** **Controlled-salinity artificial marine waters as per Grasshoff[15], [16]**
- B.4.3.4.1** **Artificial marine water as per Grasshoff — Formula 1**
- B.4.3.4.2** **Artificial marine water as per Grasshoff — Formula 2**
- B.5** **Waste waters**
- B.5.1** **General**
- B.5.2** **WWTP water[9]**
- B.5.3** **Discharge water**
- B.5.3.1** **Source of the formula**
- B.5.3.2** **Preparation**
- B.5.4** **Artificial effluent 1[12]**
- B.5.5** **Artificial effluent 2[11]**
- B.5.6** **Artificial effluent 3[13]**
- B.5.7** **Typical values of the characteristic parameters of waste water formulae**

Annex C (informative) Occurrence of chemical substances in waste water, by industrial activity sector

- C.1** **Sources**
- C.2** **Industrial activities**

Annex D (informative) Leachate

- D.1** **Definition**
- D.1.1** **Land leachate**
- D.1.2** **Prepared leachate**
- D.2** **Preparation of leachate representative matrix**
- D.2.1** **Land leachate**
- D.2.2** **Prepared leachate**

Page count: 34