

ISO 21268-1:2019 (E)

Soil quality — Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials — Part 1: Batch test using a liquid to solid ratio of 2 l/kg dry matter

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Reagents
6	Apparatus
7	Sample pretreatment
7.1	Preparation of laboratory sample and specification of particle size
7.2	Preparation of test sample
7.3	Determination of dry matter content and water content
7.4	Preparation of the test portion
8	Procedure
8.1	Temperature
8.2	Description of the procedure
8.2.1	Preparation of the eluent
8.2.2	Leaching step
8.2.3	Liquid/Solid separation step
8.3	Further preparation of the eluate for analysis
8.4	Blank test for the application of the leaching procedure
9	Calculation
10	Test report
11	Analytical determination
11.1	General
11.2	Blank test information
12	Performance characteristics
12.1	General
12.2	Validation results obtained for DIN 19529
12.2.1	General
12.2.2	Results for test material containing inorganic substances
12.2.3	Results for test materials containing organic substances
12.2.3.1	Validation trial 1
12.2.3.2	Validation trial 2
Annex A	(informative) Information on the influence on the test results of the parameters that affect leaching
A.1	Overview
A.2	General aspects

- A.3** Factors influencing leaching
- A.3.1** Influence of contact time
- A.3.2** Influence of the liquid to solid ratio (L/S)
- A.3.3** Influence of pH
- A.3.4** Influence of reducing properties
- A.3.5** Factors influencing the leaching of organic substances
- A.3.6** Special requirements for tests considering semi-volatile substances
- A.4** Analytical versus leaching test errors
- A.5** Evaluation of test results

Annex B (informative) Example of a specific liquid-solid separation procedure for soil samples (applying only to the leaching of inorganic substances)

- B.1** General
- B.2** Apparatus
- B.3** Procedure

Annex C (informative) Calculation of centrifugation duration depending on centrifugation speed and rotor dimensions

- C.1** General
- C.2** Calculations

Page count: 27