ISO 21268-2:2019 (E)

Soil quality — Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials — Part 2: Batch test using a liquid to solid ratio of 10 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