

ISO 21268-4:2019-11 (E)

Soil quality - Leaching procedures for subsequent chemical and ecotoxicological testing of soil and soil-like materials - Part 4: Influence of pH on leaching with initial acid/base addition

| Contents | | Page |
|--|---|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 2 |
| 4 | Principle | 3 |
| 5 | Reagents | 4 |
| 6 | Apparatus | 4 |
| 7 | Sample pretreatment | 6 |
| 7.1 | Preparation of laboratory sample and specification of particle size | 6 |
| 7.2 | Preparation of test sample | 6 |
| 7.3 | Determination of the dry matter content and of water content | 6 |
| 7.4 | Preparation of the test portion | 7 |
| 8 | Procedure | 7 |
| 8.1 | Contact time | 7 |
| 8.2 | pH-range | 7 |
| 8.3 | Leaching test | 8 |
| 8.3.1 | General | 8 |
| 8.3.2 | Preparation of leachants | 8 |
| 8.3.3 | Leaching step | 9 |
| 8.3.4 | Liquid/solid separation step | 10 |
| 8.4 | Natural pH | 11 |
| 8.5 | Further preparation of the eluate for analysis | 11 |
| 8.6 | Blank test | 11 |
| 9 | Calculation | 12 |
| 10 | Test report | 12 |
| 11 | Analytical determination | 13 |
| 11.1 | General | 13 |
| 11.2 | Blank test information | 13 |
| 12 | Performance characteristics | 13 |
| Annex A (informative) Example of a specific liquid-solid separation procedure for soil samples | | 14 |
| Annex B (informative) Operation and uses of the test -- Influence of pH on the leaching behaviour .. | | 16 |
| Annex C (informative) Preliminary determination of the acid/base consumption | | 20 |

| | |
|--|-----------|
| Annex D (informative) Repeatability and reproducibility data | 24 |
| Annex E (informative) Calculation of centrifugation duration depending on centrifugation speed and rotor dimensions | 28 |
| Bibliography | 30 |