DIN EN ISO 17512-1:2020-12 (E)

Soil quality - Avoidance test for determining the quality of soils and effects of chemicals on behaviour - Part 1: Test with earthworms (Eisenia fetida and Eisenia andrei) (ISO 17512-1:2008)

Contents

Page

European foreword 3

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Principle 7

5 Reagents and materials 8

6 Apparatus 9

7 Procedure 10
7.1 Appropriate concentration range 10
7.2 Testing of soils 10
7.3 Testing of chemical 11
7.4 Reference substance 11
7.5 Validity criteria 11

8 Calculation and expression of results 11

9 Test report 12

Annex A (informative) Test chambers 13

Annex B (informative) Example of a breeding technique for Eisenia fetida and Eisenia andrei 16

Annex C (informative) Further test organisms 17

Annex D (informative) Contaminants that earthworms can detect and avoid in the avoidance test 18

Annex E (normative) Testing of chemicals in the avoidance test 19

Annex F (normative) Determination of water-holding capacity 21

Annex G (informative) Comparison of the results obtained in the two section chamber and six section chamber system 22

Annex H (informative) Influence of soil properties on avoidance behaviour -- Basis for the threshold value of 20 % 25

Annex I (informative) Data gained in "dual" tests with the same (untreated) control soil on both sides of the test vessels 27

Bibliography 29