DIN EN ISO 11267:2023-12 (E)

Soil quality - Inhibition of reproduction of Collembola (Folsomia candida) by soil contaminants (ISO 11267:2023)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **6**

3 Terms and definitions ... **6**

4 Principle ... **8**

5 Reagents and material ... **9**

6 Apparatus ... **11**

7 Procedure ... **11**
7.1 Experimental design ... 11
7.1.1 General ... 11
7.1.2 Range-finding test ... 11
7.1.3 Definitive test ... 12
7.2 Preparation of test mixture ... 12
7.2.1 Testing contaminated soil ... 12
7.2.2 Testing substances added to the test substrate ... 13
7.2.3 Preparation of control container ... 13
7.3 Addition of the biological material ... 14
7.4 Test conditions and measurements ... 14
7.5 Determination of surviving Collembola ... 14

8 Calculation and expression of results ... **14**
8.1 Calculation ... 14
8.2 Expression of results ... 14

9 Validity of the test ... **15**

10 Statistical analysis ... **15**
10.1 General ... 15
10.2 Single-concentration tests ... 15
10.3 Multi-concentration tests ... 16
10.3.1 Range-finding test ... 16
10.3.2 Definitive test ... 16

11 Test report ... **17**

Annex A (informative) **Techniques for rearing and breeding *Folsomia candida*** ... **18**

Annex B (normative) **Determination of water-holding capacity** ... **20**

Annex C (informative) **Guidance on adjustment of pH of artificial soil** ... **21**

Annex D (informative) **Extraction and counting of Collembola** ... **22**

Annex E (informative) **Specific information of alternative Collembolan species other than *Folsomia candida*** ... **23**

Bibliography ... **37**