ISO 15952:2018 (E)

Soil quality — Effects of pollutants on juvenile land snails (Helicidae) — Determination of the effects on growth by soil contamination

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Test environment

6 Reagents

7 Apparatus

8 Storage and preparation of the samples

8.1 Soil to be tested
8.2 Waste material

9 Procedure

9.1 Preparation of the test
9.1.1 Selection of the concentrations to be tested
9.1.1.1 Preliminary test
9.1.1.2 Definitive test
9.1.2 Preparation of test mixtures
9.1.2.1 General
9.1.2.2 Water-soluble or emulsifiable substances and preparations
9.1.2.3 Water-insoluble substances and preparations, but soluble in organic solvents
9.1.2.4 Substances and preparations insoluble in both water and organic solvents
9.1.2.5 Matrix
9.2 Distribution of test mixture
9.3 Introduction of the feed
9.4 Introduction of the biological reagent
9.5 Handling during the tests
9.5.1 General
9.5.2 Routine care
9.5.3 Weekly task

10 Reference substance

11 Calculations and expression of results

11.1 Calculations
11.2 Expression of results

12 Validity of test

13 Test report

Annex A (informative) Static method

A.1 General

A.2 Procedure
A.3 Reference substance

Annex B (informative) Breeding technique for snails

B.1 General
B.2 Environment parameters
B.2.1 Lighting
B.2.2 Temperature
B.2.3 Hygrometry
B.2.4 Feed
B.2.5 Density of organisms
B.3 Breeding equipment (see Figure B.2)
B.3.1 Specific breeding cages for snails (BCS).
B.3.2 Egg-laying containers.
B.3.3 Incubation containers.
B.4 Maintaining of the breeding
B.4.1 Cleaning and food
B.4.2 Reproduction
B.4.3 Incubation/hatching
B.4.4 Nursery

Annex C (informative) Example of composition of snail feed

Annex D (informative) Example of table of data

Annex E (informative) Example of results with Helix aspersa aspersa

Annex F (informative) Determination of the effects on growth by food contamination

F.1 Introduction
F.2 Principle
F.3 Reagents
F.4 Procedure
F.4.1 Preparation of the test mixtures
F.4.1.1 General
F.4.1.2 Water-soluble or emulsifiable substances and preparations
F.4.1.3 Water-insoluble substances and preparations, but soluble in organic solvents
F.4.1.4 Substances and preparations insoluble in both water and organic solvents
F.4.2 Distribution of the test substrate
F.4.3 Introduction of the test mixture
F.4.4 Handling during the tests
F.5 Reference substance
F.6 Expression of results

Annex G (informative) Suitable other snail species

Page count: 34