

Contents

| | |
|-----------|--|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 4 | Principle |
| 4.1 | General |
| 4.2 | Resistance to fungi |
| 4.2.1 | Method A: Fungal-growth test |
| 4.2.2 | Method B: Determination of fungistatic effects |
| 4.3 | Method C: Resistance to bacteria |
| 4.4 | Method D: Resistance to microbially active soil (soil-burial test) |
| 4.5 | Choice of properties for assessment of biodeterioration |
| 5 | Apparatus and materials |
| 5.1 | For all tests |
| 5.2 | For tests with fungi |
| 5.3 | For tests with bacteria |
| 5.4 | For soil-burial tests |
| 6 | Test specimens |
| 6.1 | Shape and dimensions |
| 6.2 | Specimen test series and numbers in each test series |
| 6.2.1 | Specimen test series |
| 6.2.2 | Numbers in each test series |
| 7 | Preparation of specimens |
| 7.1 | Cleaning |
| 7.2 | Labelling and storage |
| 7.3 | Conditioning and weighing |
| 8 | Procedures |
| 8.1 | Test temperature |
| 8.2 | Test methods |
| 8.2.1 | General |
| 8.2.2 | Fungal-growth test (method A) |
| 8.2.2.1 | Arrangement of test specimens in humid chamber |
| 8.2.2.1.1 | Preparation of humid chamber |
| 8.2.2.1.2 | Placing of test specimens in humid chamber |
| 8.2.2.2 | Preparation of spore suspension |
| 8.2.2.2.1 | General |
| 8.2.2.2.2 | Harvesting the spores |
| 8.2.2.2.3 | Washing the spores by centrifugation, and preparation of working suspensions |
| 8.2.2.3 | Spore viability check |
| 8.2.2.4 | Inoculation or disinfection of specimens |
| 8.2.2.5 | Incubation |
| 8.2.3 | Determination of fungistatic effect (method B) |
| 8.2.3.1 | Filling the Petri dishes |
| 8.2.3.2 | Arrangement of test specimens |

- 8.2.3.3 Preparation of spore suspension
 - 8.2.3.4 Spore viability check
 - 8.2.3.5 Inoculation or disinfection of specimens
 - 8.2.3.6 Incubation
 - 8.2.4 Procedure with bacteria (method C)
 - 8.2.4.1 Cleaning the specimens
 - 8.2.4.2 Preparation of mineral-salt agar medium
 - 8.2.4.3 Preparation of bacterial cell suspension
 - 8.2.4.4 Viability check
 - 8.2.4.5 Inoculation of mineral-salt agar medium
 - 8.2.4.6 Filling the Petri dishes and arrangement of test specimens
 - 8.2.4.6.1 Test series I (inoculated specimens for incubation)
 - 8.2.4.6.2 Test series S (sterile controls)
 - 8.2.4.7 Incubation
 - 8.2.5 Soil-burial test (method D)
 - 8.2.5.1 Biological activity of the soil
 - 8.2.5.2 Procedure
- 9 Assessment**
- 9.1 Assessment of fungal growth on the specimens by visual examination (methods A, B and D)
 - 9.2 Evaluation of the test specimens for the determination of changes in mass and/or in other physical properties
 - 9.2.1 Cleaning
 - 9.2.2 Change in mass
 - 9.2.3 Determination of changes in other physical properties
- 10 Expression of results**
- 10.1 General
 - 10.2 Visual assessment
 - 10.3 Change in mass
 - 10.4 Changes in other physical properties
- 11 Accuracy of the measurements**
- 12 Test report**
- Annex A (normative) Determination of the water content and water holding capacity of a soil**
- A.1 General
 - A.2 Determination of water content
 - A.3 Determination of water-holding capacity
- Annex B (normative) Negative control for Test A**
- B.1 Test surface
- Annex C (normative) Grid for evaluation of fungal surface growth (Test A)**
- Annex D (informative) Information on test fungi**