

ISO 18187:2024-05 (E)

Soil quality - Contact test for solid samples using the dehydrogenase activity of *Arthrobacter globiformis*

| Contents | | Page |
|---|---|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Principle | 4 |
| 5 | Reagents and material | 4 |
| 5.1 | Test organisms | 4 |
| 5.2 | Control substrates | 4 |
| 5.2.1 | General | 4 |
| 5.2.2 | Control for soils | 4 |
| 5.2.3 | Control for waste material | 5 |
| 5.3 | Test substrates | 5 |
| 5.4 | Reagents | 6 |
| 6 | Apparatus | 8 |
| 7 | Procedure | 9 |
| 7.1 | Preparation of dilutions | 9 |
| 7.2 | Reference substances and positive control preparation | 9 |
| 7.3 | Contact test procedure | 10 |
| 7.3.1 | General | 10 |
| 7.3.2 | Aeration | 10 |
| 7.3.3 | Deactivation | 11 |
| 7.3.4 | Preparation of the inoculum | 11 |
| 7.3.5 | Incubation and fluorescence measurement | 11 |
| 7.4 | Interferences | 11 |
| 8 | Calculation and expression of results | 12 |
| 8.1 | Calculation | 12 |
| 8.1.1 | Relative fluorescence | 12 |
| 8.1.2 | Determining the percentage of inhibition | 12 |
| 8.2 | Expression of results | 12 |
| 9 | Validity of the test | 13 |
| 10 | Statistical analysis | 13 |
| 11 | Test report | 14 |
| Annex A (informative) Results on the interlaboratory test | | 15 |
| Annex B (informative) Preparation of test organisms | | 22 |
| Annex C (informative) Testing chemical substances | | 24 |
| Bibliography | | 26 |