

ISO 4979:2023-06 (E)

Water quality - Aquatic toxicity test based on root re-growth in *Lemna minor*

| Contents | Page |
|--|-------------|
| Foreword..... | iv |
| Introduction..... | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Principle | 3 |
| 5 Test organisms | 3 |
| 6 Growth medium | 3 |
| 6.1 Preparation of stock solution..... | 3 |
| 6.2 Storage and cultivation..... | 4 |
| 7 Apparatus | 4 |
| 8 Experimental methods | 5 |
| 8.1 Preparation of medium..... | 5 |
| 8.2 Preparation of toxicant solution and test dilutions..... | 6 |
| 8.2.1 Test dilutions..... | 6 |
| 8.2.2 Selection of test concentrations..... | 6 |
| 8.3 Control..... | 6 |
| 8.4 Transfer of test organisms..... | 6 |
| 8.5 Culture..... | 6 |
| 8.6 Method of measurements..... | 7 |
| 9 Tests on effects | 7 |
| 9.1 Reference chemicals..... | 7 |
| 9.2 Statistics..... | 7 |
| 9.3 Validity of test..... | 7 |
| 9.4 Precision..... | 8 |
| 10 Expression of results | 8 |
| 10.1 Test results..... | 8 |
| 10.2 Expression of results..... | 8 |
| 11 Test report | 8 |
| Annex A (informative) Root excision and re-growth length measurement | 10 |
| Annex B (informative) Interlaboratory precision of control values and EC₅₀ from the <i>Lemna</i> toxicity test | 12 |
| Bibliography | 14 |