

# DUCKWEED TOXKIT F

## DUCKWEED TOXICITY TEST



**72 h growth inhibition test with the duckweed species *Spirodela polyrhiza***

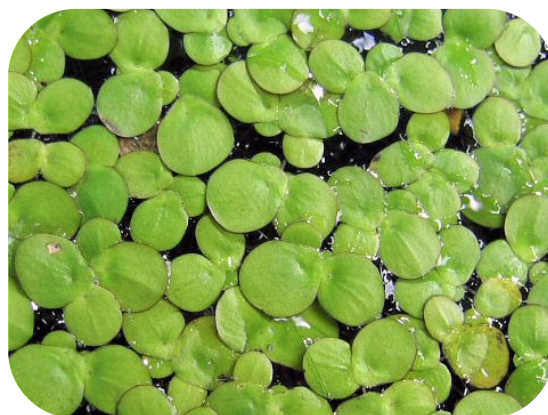
**Conform with ISO Standard 20227**

The DUCKWEED TOXKIT F contains all the materials to perform **two toxicity tests**

The test species are included in the kit as turions (vegetative buds) which can be stored and germinated on demand, to supply the duckweeds for the conduct of the toxicity test

Standardised and culture-independent small-scale bioassays with the higher aquatic plant, duckweed species *Spirodela polyrhiza*

DUCKWEED TOXKIT F applicable for toxicity screening of chemicals - effluents - sediment pore waters and elutriates - surface and groundwaters - wastewaters - pesticides and other research applications



 **MICROBIOTESTS**

**MICROBIOTESTS INC** - Kleimoer 15 - 9030 Gent - BELGIUM

T: +32 9 380 85 45

[info@microbiotests.com](mailto:info@microbiotests.com)

[www.microbiotests.com](http://www.microbiotests.com)



# DUCKWEED TOXKIT F

## 72 h Duckweed Toxicity Test For Toxicity Screening of Chemicals - Effluents - Sediments pore waters and elutriates Surface and Groundwaters - Wastewaters - Pesticides

### CONTENTS OF THE DUCKWEED TOXKIT F

The DUCKWEED TOXKIT F contains all materials to perform two complete acute toxicity tests with the higher aquatic plant, duckweed species *Spirodela polyrhiza*.

- Tubes with turions, concentrated growth and toxicant dilution medium, germination and test containers and a spatula for the transfer of the germinated turions
- Detailed Standard Operating Procedure, data scoring sheets
- Quality Control specification sheet

#### REPRODUCIBILITY

#### COST-EFFECTIVENESS

#### USER-FRIENDLINESS

- The dormant turions can be germinated on demand, eliminating the cost of continuous culturing and maintenance of stocks of test organisms.
- Turions of high quality produced in strictly controlled conditions preclude variability associated with recruitment/maintenance of live stocks in conventional bioassays.
- Shelf life of the turions is guaranteed for several months when stored properly, reducing test scheduling constraints.
- The Duckweed Toxkit F has easy to follow instructions for the conduct of the toxicity test.
- Growth inhibition of the duckweed is determined by area measurement of the first frond with the aid of digital Image Analysis.
- Minimal equipment and space is needed for the test performance: incubator with lights - conventional laboratory glassware.

#### SENSITIVITY

#### VALIDATION

- The sensitivity of the duckweed species *Spirodela polyrhiza* used in this microbioassay is comparable to the sensitivity of the *Lemna* duckweed species used in conventional duckweed assays.
- The Duckweed Toxkit F with *Spirodela polyrhiza* is used in many environmental laboratories and research institutes worldwide and is validated by an extensive international interlaboratory comparison.
- The DUCKWEED TOXKIT F strictly adheres to the protocols for regulatory testing prescribed by international organisations; ISO Standard 20227.
- A substantial number of publications, posters, reports and reviews can be found on [www.microbiotests.com](http://www.microbiotests.com)