

ALGALTOXKIT F F

FRESHWATER ALGAE Toxicity TEST



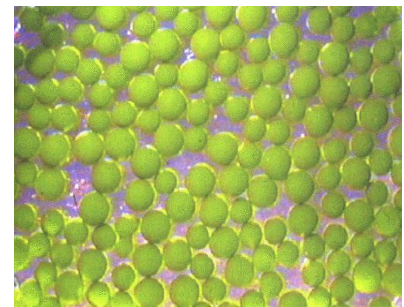
72 h growth inhibition test with the freshwater micro-algae *Pseudokirchneriella subcapitata*

(formerly named *Raphidocelis subcapitata* or *Selenastrum capricornutum*)

Conform with ISO Standard 8692
OECD Guideline 201

The ALGALTOXKIT F contains all the materials to perform **two growth inhibition tests**

The test organisms are included in the kit as **algal beads** from which the microalgae can easily be set free to supply the live biota for the conduct of the algae toxicity test



Algal beads (2mm) > 1 million cells per bead

Standardised and culture-independent small-scale bioassays with the freshwater microalgae *Pseudokirchneriella subcapitata*

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



Algal cells

**72 h Freshwater Algae Toxicity Test For Toxicity Screening of
Chemicals - Effluents - Sediment pore waters and elutriates
Surface and Groundwaters - Wastewaters**

CONTENTS OF THE ALGALTOXKIT F

The ALGALTOXKIT F contains all materials to perform two complete growth inhibition tests with the freshwater microalgae *Pseudokirchneriella subcapitata*.

- Tubes with algal beads, concentrated algal growth and toxicant dilution medium, long cell cuvettes
- Detailed Standard Operating Procedure, OD/N regression sheet, data scoring sheets
- Quality Control specification sheet

REPRODUCIBILITY

COST-EFFECTIVENESS

USER-FRIENDLINESS

- Bioassays can be started immediately after de-immobilisation of the microalgae from the algal beads.
- Algal beads of high quality are produced in strictly controlled conditions. This precludes variability associated with recruitment/maintenance of live stocks of microalgae in exponential growth phase, in conventional bioassays.
- Shelf life of algal beads is guaranteed for several months when stored properly, reducing test scheduling constraints.
- The Algaltoxkit F has easy to follow instructions for the conduct of the toxicity test.
- The Algaltoxkit F makes use of unique disposable long cell exposure chambers (10 cm path length), which also serve as measuring cuvettes for direct determination of algal growth by optical density measurements.
- Labour time for testing is significantly reduced by the direct measurement of algal growth in the long cells in a spectrophotometer with a 10 cm cuvette holder. Daily scoring takes less than 15 min.
- Minimal equipment and space is needed for the test performance: tabletop centrifuge - spectrophotometer - incubator with lights - conventional laboratory glassware.

SENSITIVITY

VALIDATION

- The sensitivity of the Algaltoxkit F toxicity test is comparable to the sensitivity of the conventional algae toxicity test with microalgae from laboratory cultures.
- The test is used in many environmental laboratories and research institutes worldwide and is validated by extensive international interlaboratory comparisons.
- The ALGALTOXKIT F strictly adheres to the protocols for regulatory testing prescribed by international organisations; ISO Standard 8692 and OECD Guideline 201.
- A substantial number of publications, posters, reports and reviews can be found on www.microbiotests.com