

ALGALTOXKIT M

MARINE ALGAE Toxicity TEST

72 h growth inhibition test with the marine microalgae *Phaeodactylum tricornutum*

Conform with ISO Standard 10253

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

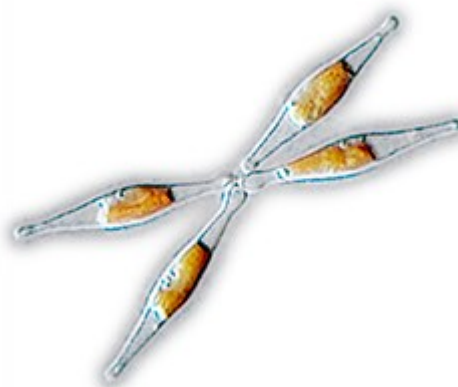
An algal inoculum composed of diatoms in “steady state” condition is included in the kit. The microalgae needed for the conduct of the assays are obtained by 3 days pre-culturing of the inoculum

Standardised and culture-independent small-scale

bioassays with the marine microalgae

Phaeodactylum tricornutum

ALGALTOXKIT M applicable for toxicity screening of chemicals - contaminated coastal and estuarine waters - effluents or elutriates with high conductivity values and for other research applications



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ALGALTOXKIT M

72 h Marine Algae Toxicity Test For Toxicity Screening of
Chemicals - Contaminated coastal and marine waters -
Effluents and Elutriates with high conductivity values

CONTENTS OF THE ALGALTOXKIT M

The ALGALTOXKIT M contains all materials to perform two complete growth inhibition tests with the marine microalgae *Phaeodactylum tricornutum*.

- Tubes with diatom inoculum, 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

- Rapid and practical set up of the diatom pre-culturing from the steady state inoculum.
- The uniform high quality diatom inoculum is produced in strictly controlled conditions. This precludes the variability associated with continuous maintenance and sub-culturing of laboratory algal stocks.
- Shelf life of the diatom inoculum is guaranteed for several months when stored properly, reducing test scheduling constraints.
- The marine Algaltoxkit M has easy to follow instructions for the conduct of the toxicity test.
- The test 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: spectrophotometer - incubator with lights - conventional laboratory glassware.

SENSITIVITY

VALIDATION

- The sensitivity of the marine Algaltoxkit toxicity test is comparable to the sensitivity of the conventional algae toxicity test with microalgae from laboratory cultures.
- The test is used in environmental laboratories and research institutes worldwide and is validated by international interlaboratory comparisons.
- The ALGALTOXKIT M strictly adheres to the protocols for regulatory testing prescribed by international organisations; ISO Standard 10253.
- A substantial number of publications, posters, reports and reviews can be found on www.microbiotests.com