

## PROTOXKIT F

### PROTOZOAN Toxicity TEST

24 h growth inhibition test with  
the freshwater ciliated protozoan  
*Tetrahymena thermophila*

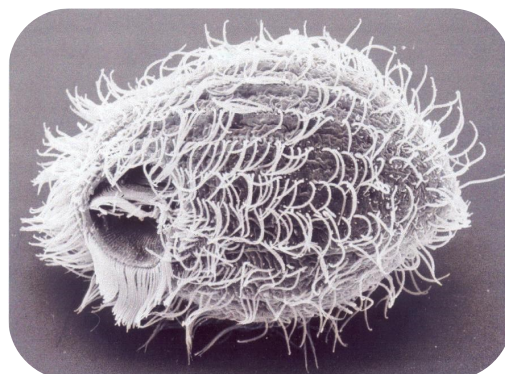
The PROTOXKIT F contains all the materials to  
perform **six chronic toxicity tests**

The test organisms are included in the kit in a **steady state** condition to supply directly the live biota for the conduct of the toxicity test



Standardised and culture-independent small-scale bioassays with the freshwater ciliated protozoan  
*Tetrahymena thermophila*

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



## CONTENTS OF THE PROTOXKIT F

The PROTOXKIT F contains all materials to perform six complete chronic toxicity tests with the freshwater ciliated protozoan *Tetrahymena thermophila*.

- Stock culture vial, sterile syringes, tubes with substrate and reconstitution medium, concentrated toxicant dilution medium, spectrophotometric cells and cell holders
- Detailed Standard Operating Procedure, data scoring sheets
- Quality Control specification sheet

### REPRODUCIBILITY

### COST-EFFECTIVENESS

### USER-FRIENDLINESS

- Tests can be started from stock culture vial, eliminating the cost of continuous culturing and maintenance of test organisms.
- Uniform axenic stock cultures of high quality produced in strictly controlled conditions preclude variability associated with recruitment/maintenance of live stocks in conventional bioassays.
- Shelf life of stock culture is guaranteed for several months when stored properly, reducing test scheduling constraints.
- Bioassays can be started anytime immediately from the stock culture.
- The Protoxkit F has easy to follow instructions for the conduct of the toxicity test.
- The test uses standard disposable spectrophotometric cells as test containers, with direct measurement of the optical densities of the substrate in the cells.
- Minimal equipment and space is needed for the test performance: spectrophotometer - incubator -conventional laboratory glassware.

### SENSITIVITY

### VALIDATION

- The sensitivity of *Tetrahymena thermophila* is comparable to that of other ciliates in activated sludges and is hence a good indicator for toxic hazard in influents of wastewater treatment plants.
- Growth inhibition NOEC's determined with Protoxkit F tests are ecologically meaningful thresholds for the protection of protozoan microfauna in benthic communities and the wellfunctioning of the ciliate component in activated sludges.
- The PROTOXKIT F is used in many environmental laboratories and research institutes worldwide.
- A substantial number of publications, posters, reports and reviews can be found on [www.microbiotests.com](http://www.microbiotests.com)