### ACUTE CERIODAPHTOXKIT F<sup>TM</sup> MICROBIOTEST

With the freshwater crustacean *Ceriodaphnia dubia* 



# Cost-effective, culture/maintenance free\* bioassays

\* Test organisms are included in the kits as "dormant eggs (ephippia)" which can be hatched "on demand"



Each Toxkit contains all the materials for performance of 6 complete bioassays

## ACUTE CERIODAPHTOXKIT F

### 24h Microbiotest For Toxicity Screening of

Pure Compounds - Effluents - Sediments -Surface and Ground Waters - Wastewaters

Like the DAPHTOXKITS F magna and DAPHTOXKIT F pulex the CERIO-DAPHTOXKIT F contains all the materials necessary to perform six acute toxicity tests with the freshwater crustacean Ceriodaphnia dubia.

Easy to follow instructions and detailed illustrations are provided in the kits for the conduct of range-finding and definitive tests.

The test organisms are included in the kits as « dormant eggs (ephippia)» which can easily be hatched on demand in 80h, to supply the live biota for the conduct of the assays.

#### **Test criterion**

 The CERIODAPHTOXKIT F microbiotests are 24h assays based on mortality of the test organisms, with calculation of the 24hLC50.

#### Reproducibility

- Ephippia (dormant eggs) of high quality produced in strictly controlled conditions preclude variability associated with recruitment/ maintenance of live stocks in conventional bioassays.
- Highly uniform quality of the test medium is achieved by simple dilution of concentrated solutions of selected salts with deionized water.
- Standardized microplate test containers constructed of biologically inert materials ensure uniform exposure conditions.
- A Quality Control Test with a reference chemical is described in detail, for accuracy and reproducibility check.

#### **Cost-Effectiveness**

- Ephippia can be hatched "on demand", eliminating the need and the costs of continuous culturing and maintenance of test organisms.
- Minimal equipment needed for test performance: light table or dissecting microscope - small incubator - conventional

laboratory glassware.

• Shelf-life of ephippia guaranteed for several months when stored properly, reducing test scheduling constraints.

#### **Contents**

- Tubes with ephippia, concentrated hatching and toxicant dilution medium, hatching and test containers and micropipettes for the transfer of the organisms.
- Detailed Standard Operational Procedure brochure, abbreviated Bench Protocol, data scoring sheets and graphical LC50 calculation sheets.
- Specification sheet with batch number of the ephippia and the media.

#### **User-Friendliness**

- Simple handlings and scorings.
- Total performance time of the assay approximately 1 hour.
- A floppy disc for easy Toxkit data treatment can be obtained on demand.

#### Sensitivity

Comparable to the sensitivity of Ceriodaphnias from laboratory cultures.

#### Validation

- Used in many laboratories, especially in the USA and Canada for routine screening of chemicals and environmental samples.
- Substantial number of publications reporting data for various uses.
- The acute CERIODAPHTOXKIT microbiotest strictly adheres to the protocols for regulatory testing with Daphnias.

A list of selected references is available upon request.

#### N.B. All the materials included in the CERIODAPHTOXKIT are also available separately.