

DAPHTOXKIT F

MICROBIOTEST

Cost-effective, culture/maintenance free* bioassay with the freshwater crustacean *Daphnia magna*

DAPHTOXKIT F

magna

Contains all the materials to perform six 24 - 48h immobility/mortality tests



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

DAPHTOXKIT F

24-48h Microbiotests For Toxicity Screening of Pure Compounds - Effluents - Sediments - Surface and Ground Waters - Wastewaters

*The DAPHTOXKIT F magna contains all the materials necessary to perform six acute toxicity tests with the freshwater crustacean *Daphnia magna*. Easy to follow instructions and detailed illustrations is provided in the kit for the conduct of range-finding and definitive tests. The test organisms are included in the kit as «dormant eggs (ephippia)» which can easily be hatched on demand in 72h, to supply the live biota for the conduct of the assays.*

Test criterion

- The DAPHTOXKIT F microbiotest is a 24-48h assays based on immobility or mortality of the test organisms, with calculation of the EC50 or LC50.

Reproducibility

- Ehippia 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

- Ehippia 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 ehippia guaranteed for several months when stored properly, reducing test scheduling constraints.

Contents

- Tubes with ehippia, 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 L(E)C50 calculation sheets.
- Specification sheet with batch number of the ehippia and the media.

User-Friendliness

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

Sensitivity

- Totally identical to the sensitivity of Daphnids from laboratory cultures.

Validation

- DAPHTOXKITS are used in many laboratories worldwide for routine toxicity screening of chemicals and environmental samples, and they are validated by extensive international interlaboratory comparisons.
- **The DAPHTOXKIT microbiotest strictly adheres to the protocols for regulatory testing with Daphnias prescribed by international organizations (e.g. ISO standard 6341 and OECD Guideline 202).**
- A substantial number of publications, reports and posters can be found in the section "Publications" on website www.microbiotests.be

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