



OECD 201: alga growth inhibition test - limit test and EC50 – GLP

Application field

This test is applicable to readily and poorly soluble and volatile substance.

Interests

The purpose of the test is to determine the effects of chemicals on the growth of a unicellular green algal species (*Pseudokirchneriella subcapitata*). Relatively brief tests can assess affects over several generations.

Principle of the test

Exponentially-growing cultures of selected green algae are exposed to the test substance at a concentration of 100 mg/l in the limit test, or at a range of five concentrations in the full study (EC50 test) for a period of 72 hours.

Normative references

OECD Guidelines for testing of Chemicals – Alga, Growth Inhibition test. N° 201 – 07/06/1984.

Restrictions

- For substances with limited solubility in the test medium it may not be possible to quantitatively determine the EC50.
- For substances that interfere directly with measurement of algal growth

Expression of results

The percentage reduction in average growth rate at each substance concentration compared to the control value is plotted against the logarithm of the concentration to calculate the EC50.

Number of products

Quantity necessary to the analysis

Quantity on request with the following information:

- Name of the product
- Batch number
- Expiry date
- Storage and stability conditions
- Qualitative composition
- Quantitative composition
- Certificate of analysis
- Water solubility
- pKa value
- n-Octanol/water partition coefficient.

Services

Chemistry/Biochemistry
Cell Banking Services
Facility & Process Validation
Method Development & Validation
Microbiology
Molecular & Cell Biology

Raw Materials Testing
Release Testing
Residuals & Impurities Testing
Stability Testing & Storage
Viral Clearance & Viral Safety
Professional Scientific StaffingSM

Facilities

Belgium	Italy
Denmark	Spain
France	Sweden
Germany	U.S.
Ireland	

The largest network
of harmonized
bio/pharmaceutical
GMP product testing
labs worldwide.

www.eurofins.com