



## OECD 201: ALGA, GROWTH INHIBITION TEST - limit test and EC<sub>50</sub> - 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 (EC<sub>50</sub> 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 EC<sub>50</sub>.
- 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 EC<sub>50</sub>.

### Number of products/Quantity necessary to the analysis

Quantity on request with the following information:

- name of the product;
- batch number;
- expiry data;
- storage and stability conditions;
- qualitative/quantitative composition;
- certificate of analysis;
- water solubility;
- pK<sub>a</sub> value;
- n-Octanol/water partition coefficient