BIODEGRABILITY
ISO 11734, ISO 14593, OECD 301 - GLP

Application field

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

Interests

The purpose of this test is to determine biodegradability (aerobic or anaerobic) of the test substance in sewage sludge (aerobic or anaerobic) solution.

Principle of the test

The test substance is added to mineral salts medium inoculated with mixed population of micro-organism and incubated for a time required in each guideline.

Normative references


Restrictions

- For substances that inhibit micro-organisms growth
- For volatile substance a case by case decision is necessary
- For chemicals of low solubility in water, the maximum concentration should not exceed the limit of solubility in the dilution water
- A reliable analytical method for the quantification of organic carbon in the test substance in the test solution must be available

Expression of results

Percentage of biodegradation of the test substance respect to a reference substance.

Number of products/Quantity necessary to the analysis

Quantity on request with the following information:
- name of the product;
- batch number and expiry data;
- storage and stability conditions;
- qualitative/quantitative composition;
- certificate of analysis and water solubility;
- pKₐ value and n-Octanol/water partition coefficient