



**STUDIES ON  
MICROORGANISMS IN WATER**

**STRONGER TOGETHER**

## Welcome to Eurofins Agrosience Services

We are a leading provider of product development consultancy and technical support to the crop protection industry. Our technical activities involve conducting field and laboratory studies to determine the safety and efficacy of new agrochemicals and crop varieties. With over 25 years of experience, Eurofins Agrosience Services offers outstanding technical knowledge and project management skills. By acquiring a carefully selected range of CRO's, we have created a unique portfolio of expertise that provides analytical, regulatory and field support to plant breeders, agrochemical, biopesticide, biocide and fine chemical manufacturers.

The toxic effects of plant protection products (PPPs), pharmaceuticals and chemicals to algae and aquatic plants are tested in accordance with the latest OECD guidelines.

All tests are based on the principle that microorganisms respire oxygen and produce carbon dioxide. Oxygen consumption is one parameter which can be followed to determine the toxicity or ready biodegradability of a test item.

### Toxicity to Microorganisms

The toxicity of a test item is determined via measuring the oxygen consumption in the Activated Sludge Respiration Inhibition test. This test is performed according to OECD guideline No. 209.

### Ready Biodegradability

The Closed Bottle Test according to OECD 301 D is performed routinely and is suitable for most test items. The measured parameter is oxygen consumption. The test item is ready biodegradable if the ratio of oxygen consumption and chemical oxygen demand (COD) is  $\geq 60\%$ . The COD is a calculated value (if the test item is pure and the structure available) or an analysed one (in case of mixtures or unknown structure).

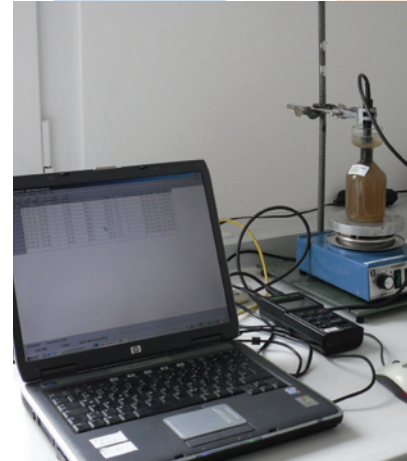
The ready biodegradability can also be tested with seawater following OECD 306.

### Eurofins Scientific Group

Eurofins Scientific is a life sciences company that serves a wide range of industries including the pharmaceutical, agricultural, food and environmental sectors.

### Today the Eurofins Group is a leading provider of analytical services with:

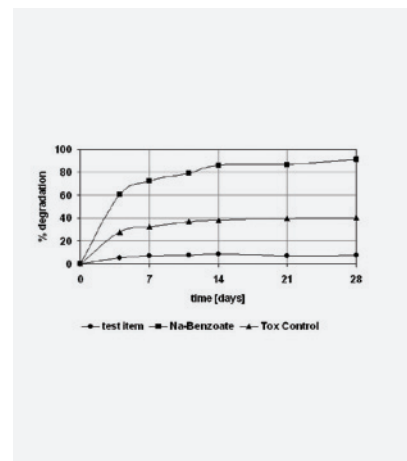
- An international network of 150 laboratories across 30 countries in Europe, the USA, Asia and South America
- About 9,500 staff
- A portfolio of over 40,000 reliable analytical methods
- More than 80 million assays per year to establish the safety, composition, authenticity, origin, traceability, identity and purity of biological substances



Activated Sludge Respiration Inhibition Test



Preparation for Activated Sludge Test



Degradation curve Closed Bottle Test