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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 21815.1-2008

**Chemicals Biodegradability in seawater -- Shake flask method
(English Translation)**

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Reference

Foreword

GB/T 21815-2008 "chemicals in seawater biodegradability" is expected to be divided into two parts.

--- Part 1 as "chemical seawater biodegradation test shake-flask method";

--- Part 2 as "Chemical seawater biodegradability Closed bottle test." this section GB/T 121815 Part of this part identical with the Organisation for Economic Co-operation and Development (OECD) Guidelines for the Testing of Chemicals no. 306 (1992) "seawater biodegradability. shake-flask method" (in English). This standard made the following editorial changes.

--- The introduction, use, method selection classified as Appendix C;

--- The units of measurement to our legal units of measurement.

Appendix A, Appendix B and Appendix C are informative appendix.

This part of the National Chemicals Management Standardization Technical Committee dangerous (SAC/TC251) and focal points.

This section is responsible for drafting unit. Department of Environmental Protection Chemical Registration Center.

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1 Scope

This section GB/T 21815 specifies the method of chemicals in seawater biodegradation test shake-flask method overview, test preparation, test Procedures, quality assurance and quality control, data and reports.

This section applies to testing and evaluation can be dissolved in water (water solubility to count C is greater than 25mg/L), not because of volatility during the test and there is significant loss of seawater no significant adsorption of organic matter in the biodegradability.

This section does not apply to C solubility in water of less than 5mg/L of organic matter.

2 Terms and definitions

The following terms and definitions apply to this part of the GB/T 21815 of.

Test substance in contact with the inoculum exhibited potential for biodegradation.

Solution, organic carbon content, often after filtration through 0.45μm membrane liquid organic carbon content, or by 4000r/min speed After centrifugation, the supernatant 15min organic carbon content.

Start of the test to the degradation rate of 10% of the period.

3 Test substance information

- a) the formula;
- b) purity;
- c) the main component and proportions;
- d) organic carbon content;
- e) solubility in water;
- f) vapor pressure;
- g) adsorption;
- h) microbial toxicity.

4.1 Method Description

Shake-flask method is to introduce improved seawater variables OECD screening test [2]. The test results are not indicative of rapid aquatic organisms Biodegradable, just to get their biological degradation in the marine environment of information. The results of the degradation is low, it does not necessarily mean the test Non-biodegradable matter in the marine environment, but rather that more work is needed to explain its degradation.

Test method described in Appendix C.