



Standard Practice for Standardized Aquatic Microcosms: Fresh Water¹

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1. Scope

1.1 This practice covers procedures for obtaining data concerning toxicity of a test material to a multi-trophic level freshwater community.

1.2 These procedures also might be useful for studying the fate of test materials and transformation products, although modifications and additional analytical procedures might be necessary.

1.3 Modification of these procedures might be justified by special needs or circumstances. Although using appropriate procedures is more important than following prescribed procedures, results of tests conducted using unusual procedures are not likely to be comparable to results of many other tests. Comparison of results obtained using modified and unmodified versions of these procedures might provide useful information concerning new concepts and procedures for conducting multi-trophic level tests.

1.4 This practice is arranged as follows:

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1.5 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* Specific hazard statements are given in Section 7.

2. Referenced Documents

2.1 ASTM Standards:

- D 1193 Specification for Reagent Water²
- D 3978 Practice for Algal Growth Potential Testing with *Selenastrum capricornutum*³
- E 380 Practice for Use of the International System of Units (SI) (The Modernized Metric System)⁴
- E 729 Guide for Conducting Acute Toxicity Tests with Fishes, Macroinvertebrates, and Amphibians³
- E 943 Terminology Relating to Biological Effects and Environmental Fate³
- E 1023 Guide for Assessing the Hazard of a Material to Aquatic Organisms and Their Uses³
- E 1192 Guide for Conducting Acute Toxicity Tests on

¹ This practice is under the jurisdiction of ASTM Committee E-47 on Biological Effects and Environmental Fate and is the direct responsibility of Subcommittee E47.01 on Aquatic Toxicology.

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² *Annual Book of ASTM Standards*, Vol 11.01.

³ *Annual Book of ASTM Standards*, Vol. 11.05.

⁴ *Annual Book of ASTM Standards*, Vol 14.02; excerpts in gray pages of Vol 11.04.