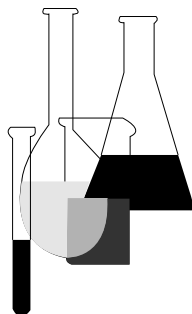




Microbial Pesticide Test Guidelines

OPPTS 885.4650 Aquatic Invertebrate Range Testing, Tier III



INTRODUCTION

This guideline is one of a series of test guidelines that have been developed by the Office of Prevention, Pesticides and Toxic Substances, United States Environmental Protection Agency for use in the testing of pesticides and toxic substances, and the development of test data that must be submitted to the Agency for review under Federal regulations.

The Office of Prevention, Pesticides and Toxic Substances (OPPTS) has developed this guideline through a process of harmonization that blended the testing guidance and requirements that existed in the Office of Pollution Prevention and Toxics (OPPT) and appeared in Title 40, Chapter I, Subchapter R of the Code of Federal Regulations (CFR), the Office of Pesticide Programs (OPP) which appeared in publications of the National Technical Information Service (NTIS) and the guidelines published by the Organization for Economic Cooperation and Development (OECD).

The purpose of harmonizing these guidelines into a single set of OPPTS guidelines is to minimize variations among the testing procedures that must be performed to meet the data requirements of the U. S. Environmental Protection Agency under the Toxic Substances Control Act (15 U.S.C. 2601) and the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136, *et seq.*).

Final Guideline Release: This guideline is available from the U.S. Government Printing Office, Washington, DC 20402 on *The Federal Bulletin Board*. By modem dial 202-512-1387, telnet and ftp: fedbbs.access.gpo.gov (IP 162.140.64.19), internet: <http://fedbbs.access.gpo.gov>, or call 202-512-0132 for disks or paper copies. This guideline is also available electronically in ASCII and PDF (portable document format) from the EPA Public Access Gopher (gopher.epa.gov) under the heading "Environmental Test Methods and Guidelines."

OPPTS 885.4650 Aquatic invertebrate range testing, Tier III.

(a) **Scope**—(1) **Applicability.** This guideline is intended to meet testing requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136, *et seq.*).

(2) **Background.** The source material used in developing this harmonized OPPTS test guideline is OPP guideline 153A–27.

(b) **Test standards.** Data must be derived from tests that satisfy the general test standards in OPPTS 885.0001 and OPPTS 885.5000 through 885.5400.

(1) **Test organisms.** Species most likely to be affected by the MPCA should be used in this test. If a microorganism that is closely related (within the same family) to the MPCA causes disease in a certain invertebrate species, that species should be included in this test.

(2) **Use pattern.** (i) Microbial pest control agents that are expected to enter freshwater ecosystems should be tested on freshwater aquatic invertebrates. Likewise, if an estuary is likely to be impacted, marine invertebrates should be included.

(ii) Testing should be performed on two members of the following orders:

Freshwater—*Cladocera, Copepoda, Ephemeroptera, Trichoptera.*

Marine—*Copepoda, Crustacea.*

(3) **Method of pesticide administration.** The test substance shall be administered either as a suspension in the test water (aqueous exposure) and/or in the diet as determined from results of Tier I tests.

(4) **Dose levels.** The dose level shall be equal to that expected to be found in the aquatic environment calculated from application rates with appropriate adjustments to take into account the environmental survival and multiplication characteristics of the MPCA being tested, as determined by Tier II testing.

(5) **Test duration.** The test duration shall be the same as Tier I studies.

(c) **Reporting and evaluation of data.** The requirements in Tier I, OPPTS 885.4050 and 885.4100, apply.

(d) **Tier progression.** (1) Further testing at Tier IV (OPPTS 885.4750) may be required if pathogenic effects are observed,

(2) Additional testing at higher tiers ordinarily is not required if pathogenic effects are not observed.

(e) **References.** The following references should be consulted for additional background material on this test guideline.

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