



# Evaluation of Wildland Fire Chemicals

## Standard Test Procedures

### **1.4 Biodegradability**

**Summary:** This testing is used to evaluate and compare the biodegradability of different wildland fire foams and water enhancers. Biodegradability is evaluated across a 28-day evaluation window using OECD 301B and OCSPP 835.33110(m) standard procedures. The results determine how readily biodegradable each product submission is by measuring carbon dioxide evolution.

The Forest Service sends a sample of each formulation to an approved testing lab. Results are sent to the Forest Service. The WFCS Project Manager compiles the results and prepares a letter to the submitter showing the performance of the submitted product. A copy of the lab results are sent to the submitter.

#### **Method:**

1. All testing will be performed in accordance with protocols of the U.S. Environmental Protection Agency (EPA), Office of Prevention, Pesticides, and Toxic Substances (OPPTS).
2. Laboratories performing the testing will comply with the EPA established Good Laboratory Practices.

#### **References:**

U.S. Environmental Protection Agency, Office of Chemical Safety and Pollution Prevention. Ready Biodegradability; 835.3110(m), Carbon Dioxide Evolution Test.

Organization for Economic Cooperation and Development. Ready Biodegradability; 301B, CO<sub>2</sub> Evolution (Modified Sturm Test).

U.S. Environmental Protection Agency, Federal Insecticide, Fungicide, and Rodenticide Act. Good Laboratory Practices; 40 CFR 160

U.S. Environmental Protection Agency, Toxic Substances Control Act. Good Laboratory Practices, 40 CFR 792