

=====Search Information=====

Searched type: SMILES

Searched input: CC=O

Selected species: all

Selected end point: all

=====Chemical Information=====

Name: Acetaldehyde

IUPAC name: acetaldehyde

CAS number: 75-07-0

SMILES: CC=O

=====Toxic Information=====

LC50; Species: *Anas platyrhynchos* (Mallard duck) diet >5000 ppm for 8 days

LC50; Species: *Colinus virginianus* (Northern bobwhite) diet 808 (495.64-1091) ppm for 8 days

LC100; Species: Aphid 0.25% acetaldehyde for 2 hr (fumigation flask)

LC100; Species: Aphid 1.5-2.0% acetaldehyde for 2-3 hr (in air-tight jars)

EC50; Species: *Pimephales promelas* (Fathead minnow); Conditions: flow-through bioassay with measured concentrations, 23.9 °C, dissolved oxygen 7.2 mg/L, hardness 53.0 mg/L calcium carbonate, alkalinity 43.2 mg/L calcium carbonate, and pH 7.63; Concentration: 30.8 mg/L for 96 hr (confidence limit 28.0-34.0 mg/L); Effect: loss of equilibrium

LC50; Species: *Pimephales promelas* (Fathead minnow); Conditions: flow-through bioassay with measured concentrations, 21.6 °C, dissolved oxygen 7.5 mg/L, hardness 46.6 mg/L calcium carbonate, alkalinity 40.5 mg/L calcium carbonate, and pH 7.1; Concentration: 37.2 mg/L for 96 hr (confidence limit 31.1- 44.4 mg/L)

LC50; Species: *Pimephales promelas* (Fathead minnow) age 30 days, 0.076 g wet weight; Conditions: freshwater, static, 21.4 °C, pH 6.97, hardness 48.0 mg/L CaCO₃, alkalinity 40.5 mg/L CaCO₃, dissolved oxygen 76.4%; Concentration: 43100 ug/L for 96 hr (95% confidence limit: 39800-46800 ug/L) /99% purity/

LC50; Species: *Poecilia reticulata* (Guppy) 10 laboratory-reared and acclimated fish, 2-3 months old; Conditions: semi-static; Concentration: 35 mg/L

LC50; Species: *Lepomis macrochirus* (Bluegill); Conditions: static; Concentration: 53

mg/L for 96 hr

LC50; Species: *Lepomis macrochirus* (Bluegill); Conditions: freshwater, static;
Concentration: 2100 ug/L for 96 hr (95% confidence limit: 1800-2400 ug/L) /94.9%
purity/

LC50; Species: *Oncorhynchus mykiss* (Rainbow trout); Conditions: freshwater, static;
Concentration: 2200 ug/L for 96 hr (95% confidence limit: 1800-2400 ug/L) /94.9%
purity/

EC50; Species: *Daphnia magna* (Waterflea); Conditions: static; Concentration: 42 mg/
L for 48 hr; Effect: immobilization

EC50; Species: Chlorococcales (Green algae order); Conditions: freshwater, static;
Concentration: 270000 ug/L for 24 hr; Effect: physiology, assimilation efficiency

EC50; Species: *Pseudokirchneriella subcapitata* (Green algae) exponential growth
phase, 15000 cells/mL, UTEX 1648; Conditions: static, 24 °C, dissolved oxygen 1-2
mg/L; Concentration: 3359 ug/L for 48 hr; Effect: physiology, decreased
photosynthesis

EC50; Species: *Pseudokirchneriella subcapitata* (Green algae) exponential growth
phase, 15000 cells/mL, UTEX 1648; Conditions: static, 24 °C, dissolved oxygen 1-2
mg/L; Concentration: 4439 ug/L for 48 hr; Effect: decreased population growth rate

LC50; Species: *Gammarus pseudolimnaeus* (Scud) adult, 0.034 g wet weight;
Conditions: freshwater, flow through, 21.6 °C, pH 7.05, hardness 46.6 mg/L CaCO₃,
alkalinity 58.0 mg/L CaCO₃, dissolved oxygen 86%; Concentration: 19300 ug/L for
96 hr (95% confidence limit: 15000-24900 ug/L) /99% purity/

=====Mass Spectrum=====

reference: http://www.hmdb.ca/spectra/ms_ms/1380

