

US EPA ARCHIVE DOCUMENT

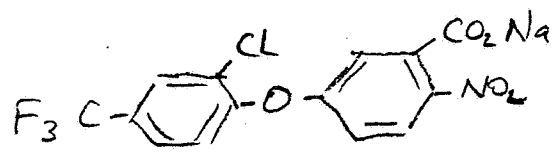
"UNDATED"

Shaugh. No. 114402

Common Name: Acifluorfen

Chemical Name: sodium salt (Sodium 5(2-chloro-4(trifluoromethyl)phenoxy-2-nitrobenzoate)

Structure:



Chemical Properties:

Molecular Weight: 383.65

Solubility (ppm): >100 (20 °C)

Partitioning:

K_{ow} _____ K_{oc} _____ $K_d = K_{abs} = K_{ps}$ silt loam 0.71-1.51 *

Hydrolysis (half-life hrs.)

(pH _____) >120 d * hr (pH _____) >120 d * hr (pH _____) >120 d * hr

K_{ah} _____ K_{nh} _____ K_{bh} _____

Photolysis (half-life hrs.)

120 hrs * (Water) 87 d (soil) K_{dp} _____

Degradation (half-life hrs.)

Soil (Aerobic) (pH 5.0-6.5 ^{sandy loam silt loam}) 7-63 to 112 d * hr K _____

Soil (Anaerobic) (pH 6.1-6.5 ^{day loam silt loam}) <7 to >160 d * hr K _____

Water (Type _____ pH _____) _____ hr K _____

Bacteriological

Soil (Type _____) _____ hr K _____

Water (Type _____) _____ hr K _____

Vapor Pressure: 24 mm

Evaporation: _____

* Approximate results - unvalidated

2/16/91 2-3 pt/A.

14-21 days from planting soybeans
seedling to 4th true
before 100 days from harvest
ground. appl.

LC50

Shrimps 3.8 ppm

Daphnia 7.03 ppm

Trout 17.8 ppm

104
104
 2×10^2
 2×10^{10}

$\frac{550}{10}$