

US EPA ARCHIVE DOCUMENT

EXPOSURE ASSESSMENT BRANCH ONE LINER

UNDATED

EAB FILE NO: 109901 TYPE PESTICIDE: Fungicide

STRUCTURE

COMMON NAME: BAYLETON

CHEMICAL NAME: 1-(4-chlorophenoxy-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanone

TYPICAL USES stone fruits, apples, almonds, pine seedlings

CHEMICAL PROPERTIES

Molecular wt.	Aqueous Solubility	Vapor Pressure	Partition Coeff. K_{ow}
<u>293.7</u>	<u>70 ppm at 20°C</u>	<u>< 10⁻⁶ mbars at 20°C</u>	<u>772 at 20°C</u>

Soil adsorption Coefficient

Soil Type	Soil			SOIL TLC Rf	Mobility Class
	O. N.	K	K _m		
<u>Kansas loam</u>	<u>3.0</u>	<u>2.31</u>			(1) Immobile (2) <u>Low</u> - parent (3) Low to Mod. (4) <u>Moderate</u> - residues (5) Mobile
<u>Hagerstown silty clay</u>	<u>2.1</u>	<u>3.54</u>			
<u>Florida sand</u>	<u>3.7</u>	<u>5.91</u>			

Degradation

Hydrolysis (25°) / Photolysis

Lab Half-life		Field half-life		PH T _{1/2}	T _{1/2}
Soil Aerobic:	<u>6 days</u>	Soil	<u>5 days</u>	<u>3 stable</u>	Soil: <u>stable</u>
Anaerobic:	<u>15 days</u>	Aquatic		<u>6 a</u>	Water: <u>10-12 hours</u>
Aquatic Aerobic:		Aquatic		<u>9 a</u>	
Anaerobic:					

FOUND IN GROUND WATER? Y N

REENTRY INTERVAL ESTABLISHED

Site(s) Level

ROTATIONAL CROP RESTRICTIONS

LEACHING POTENTIAL

Small grains - 35-days (forage and straw not for feed)
root crops - 4 months (tops not for feed)
Soybeans, beans, peas, cucurbits - 35-day
Sugar beets - 4 months

aged soil
 Lab: Yes No
 Field: Yes No
 ↑
 residues
 to 12 inches.

FISH BIOACCUMULATION FACTORS

Species	Tissue		Whole Fish	Depuration Half-life
	Edible	Viscera		
channel catfish	65-76 x	x	x	96% out in 7-10 days
	x	x	x	

DEGRADATION SUMMARY: Dazomet degrades rapidly in soil, binds fairly tightly to soil, metabolites may have potential to leach, and has K_{ow} of 772.

REFERENCES: _____