Environmental Fate & Effects Division
PESTICIDE ENVIRONMENTAL FATE ONE LINE SUMMARY
CLOFENTEZINE
Last Update on October 26, 1989
[V] = Validated Study [S] = Supplemental Study [U] = USDA Data

Common Name:CLOFENTEZINE
Smiles Code:
PC Code # :125501 CAS #:74115-24-5 Caswell #:

Chem. Name :3,6-BIS(2-CHLOROPHENYL)-1,2,4,5-TETRAZINE

Action Type:MITICIDE/OVICIDE

Trade Names:
(Formul'tn):SOL. CONC.
Physical State:

Use Patterns (% Usage) :AS AN ACARICIDE FOR THE CONTROL OF EGGS AND EARLY MOTILE :STAGES OF PANONYCHUS ULMI AND TETRANYCHUS spp ON TOP FRUIT :AND OTHER CROPS :

Empirical Form: $C_{14}H_8N_4Cl_2$
Molecular Wgt.: 303.14 Vapor Pressure: E Torr
Melting Point : °C Boiling Point: °C
Log Kow : pKa: @ °C
Henry's : E Atm. M3/Mol (Measured)

Solubility in ...				Comments
Water	1.00E	ppm	@20.0 °C	
Acetone	E	ppm	@ °C	
Acetonitrile	E	ppm	@ °C	
Benzene	E	ppm	@ °C	
Chloroform	E	ppm	@ °C	
Ethanol	E	ppm	@ °C	
Methanol	E	ppm	@ °C	
Toluene	E	ppm	@ °C	
Xylene	E	ppm	@ °C	
	E	ppm	@ °C	
	E	ppm	@ °C	

Hydrolysis (161-1)
[V] pH 5.0:248.8 HR
[V] pH 7.0:34.4 HR
[V] pH 9.0:4.3 HR
[ ] pH :
[ ] pH :
[ ] pH :

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Photolysis (161-2, -3, -4)
[V] Water: <7 DAYS AT pH 5
[ ] :
[ ] :
[ ] :

[V] Soil :STABLE
[ ] Air :

Aerobic Soil Metabolism (162-1)

	Sd	Si	Cl	pH	T1/2
[ ]					
[V]	41.7	5.9	49.2	6.6	4 WKS
[V]	68.7	18.8	1.4	6.5	6 WKS
[V]	30.1	20.5	26.8	6.2	8 WKS
[ ]					
[ ]					
[ ]					

Anaerobic Soil Metabolism (162-2)
[ ] similar to aerobic, but without CO2 evolution
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Anaerobic Aquatic Metabolism (162-3)
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Aerobic Aquatic Metabolism (162-4)
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

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Soil Partition Coefficient (Kd) (163-1)
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Soil Rf Factors (163-1)
[V] <0.15 LOAMY SAND
[V] <0.15 SANDY LOAM
[ ]
[ ]
[ ]
[ ]

Laboratory Volatility (163-2)
[ ]
[ ]

Field Volatility (163-3)
[ ]
[ ]

Terrestrial Field Dissipation (164-1)
[S] 34-83 DA BARE GROUND - TX
[S] 52 DA BARE GROUND - U.K.
[V] MOST SOIL RESIDUES BELOW DETECTION IN APPLE ORCHARD, NY
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Aquatic Dissipation (164-2)
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

Forestry Dissipation (164-3)
[ ]
[ ]

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Long-Term Soil Dissipation (164-5)
[ ]
[ ]

Accumulation in Rotational Crops, Confined (165-1)
[ ]
[ ]

Accumulation in Rotational Crops, Field (165-2)
[ ]
[ ]

Accumulation in Irrigated Crops (165-3)
[ ]
[ ]

Bioaccumulation in Fish (165-4)
[V] BECAUSE THE HYDROLYTIC T1/2 IS SO SHORT, BIOACCUMULATION
[ ] IN FISH SEEMS UNLIKELY

Bioaccumulation in Non-Target Organisms (165-5)
[ ]
[ ]

Ground Water Monitoring, Prospective (166-1)
[ ]
[ ]
[ ]
[ ]

Ground Water Monitoring, Small Scale Retrospective (166-2)
[ ]
[ ]
[ ]
[ ]

Ground Water Monitoring, Large Scale Retrospective (166-3)
[ ]
[ ]
[ ]
[ ]

Ground Water Monitoring, Miscellaneous Data (158.75)
[ ]
[ ]
[ ]

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Field Runoff (167-1)
[ ]
[ ]
[ ]
[ ]

Surface Water Monitoring (167-2)
[ ]
[ ]
[ ]
[ ]

Spray Drift, Droplet Spectrum (201-1)
[ ]
[ ]
[ ]
[ ]

Spray Drift, Field Evaluation (202-1)
[ ]
[ ]
[ ]
[ ]

Degradation Products

2-chlorobenzoic-(2-chlorobenzylidine)hydrazide (hydrol.)
2-chlorobenzonitrile (2ndary deg.)
2-chlorobenzamide (2ndary deg.)
CO2 (aerob. soil met)

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Comments

In the soil photolysis study, 85.9% of the parent remained after 31 days.
No significant leaching of parent of degradation products.
Clofentezine is a relatively short-lived, non-mobile, compound which does not pose a risk to groundwater and will not be expected to accumulate in rotational crops.
Data on aerobic soil metabolism concerns enclish soils. Sums of the components do not equal 100%.

References: FARM CHEMICALS HANDBOOK; EPA REVIEWS
Writer : PJH, updated EBC-P 5/31/91