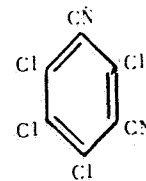


US EPA ARCHIVE DOCUMENT

ENVIRONMENTAL FATE & GROUND WATER BRANCH
 PESTICIDE ENVIRONMENTAL FATE ONE LINE SUMMARY

Page



Chlorothalonil

Common Name: **CHLOROTHALONIL** Date: 06/28/89
 Chem. Name: TETRACHLOROISOPHTHALONITRILE
 :
 Synonym : BRAVO; CLORTOCAFFARO; CLORTOSIP; DACONIL 2787
 Shaugh. # : 81901 CAS Number: 1897-45-6
 Type Pest. : Fungicide
 Formulation: WP;G; PELLET; L; SOLUBLE CONC.
 Uses : FRUITS/VEGETABLES/PEANUTS/TURF/ORNAMENTALS
 :
 :

Empir. Form: C₈Cl₄N₂ VP (Torr): 2.0E-6
 Mol. Weight: 266.0 Log Kow : 2.88
 Solub.(ppm): 1.2 @ 20 C Henry's :

Hydrolysis (161-1)	Photolysis (161-2, -3, -4)
pH 5:[*] STABLE	Air :[]
pH 7:[*] STABLE	Soil :[] STABLE
pH 9:[*] 10% DEGRADED IN 30 DAYS	Water:[] STABLE
pH :[]	: []
pH :[]	: []
pH :[]	: []

MOBILITY STUDIES (163-1)

Soil Partition (Kd)	Rf Factors
1.[] 20 SANDY LM 3.5%OM	1.[]
2.[] 3 SAND 0.6%OM	2.[]
3.[] 29 SILT 0.8%OM	3.[]
4.[] 26 SILTY CL LM 3.2%OM	4.[]
5.[]	5.[]
6.[]	6.[]

METABOLISM STUDIES (162-1,2,3,4)

Aerobic Soil (162-1)				Anaerobic Soil (162-2)	
1.[]	SOIL	NONSTERILE	STERILE	1.[]	
2.[#]	SiLm	36.5 DAYS	213.8 DAY	2.[]	
3.[#]	LOAM	14.7 "	31.3 "	3.[]	
4.[#]	SdLm	12.8 "	18.0 "	4.[]	
5.[#]	SdLm	10.3 "	21.9 "	5.[]	
6.[]				6.[]	
7.[]				7.[]	
Aerobic Aquatic (162-4)				Anaerobic Aquatic (162-3)	
1.[]				1.[*]	SiLm 9 DAYS
2.[]				2.[*]	SdLm 10 DAYS (LOG PLOT IS NON-
3.[]				3.[]	LINEAR FOR BOTH)
4.[]				4.[]	

[*] - Acceptable Study. [#] = Supplemental Study

1/3

Common Name: **CHLOROTHALONIL**

Date: 06/28/89

VOLATILITY STUDIES (163-2,3)

- Laboratory:
- Field:

DISSIPATION STUDIES (164-1,2,3,5)

Terrestrial Field (164-1)

- 1. 26-56 DA (SOIL?)
- 2.
- 3.
- 4.
- 5.
- 6.

Aquatic (164-2)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Forestry (164-3)

- 1.
- 2.

Other (164-5)

- 1.
- 2.

ACCUMULATION STUDIES (165-1,2,3,4,5)

Confined Rotational Crops (165-1)

- 1. [*] RESIDUES DETECTED
- 2.

Field Rotational Crops (165-2)

- 1. [*] RESIDUES DETECTED, TOLERANCE SETTING REQUIRED
- 2.

Irrigated Crops (165-3)

- 1.
- 2.

Fish (165-4)

- 1. BLUEGILL 200X EDIBLE, 3000X VISCERA
- 2. CATFISH 9.4X EDIBLE; 25X VISCERA; 16X WHOLE

Non-Target Organisms (165-5)

- 1.
- 2.

Common Name: **CHLOROTHALONIL**

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GROUND WATER STUDIES (158.75)

1. [*] DETECTED IN ONLY TWO LOCATIONS - - LONG ISLAND AND CAPE COD
2. []
3. []

DEGRADATION PRODUCTS

1. 4-HYDROXY-2,5,6-TRICHLORO-ISOPHTHALONITRILE
2. 2,4,5,6-TETRACHLOROISOPHTHALIMIDE (ONLY DEGRADATE IN HYDROLYSIS)
3. 3-CYANO-2,4,5,6-TETRACHLOROBENZAMIDE
4. 2-HYDROXY-5-CYANO-3,4,6-TRICHLOROBENZAMIDE
5. 3-CARBOXY-2,5,6-TRICHLOROBENZAMIDE
- 6.
- 7.
- 8.
- 9.
- 10.

COMMENTS

References:

Writer : J. HANNAN