



Chlorothalonil

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

Pag

Common Name: **CHLOROTHALONIL**

Date: 06/28/89

Chem. Name : TETRACHLOROISOPHTHALONITRILE

Synonym : BRAVO; CLORTOCAFFARO; CLORTOSIP; DAONIL 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: $C_8Cl_4N_2$

Mol. Weight: 266.0

Solub.(ppm): 1.2 @ 20 C

VP (Torr): $2.0E-6$

Log Kow : 2.88

Henry's :

Hydrolysis (161-1)

pH 5:[*] STABLE

pH 7:[*] STABLE

pH 9:[*] 10% DEGRADED IN 30 DAYS

pH :[]

pH :[]

pH :[]

Photolysis (161-2, -3, -4)

Air :[]

Soil :[] STABLE

Water:[] STABLE

: []

: []

: []

MOBILITY STUDIES (163-1)

Soil Partition (Kd)

1.[] 20 SANDY LM 3.5%OM

2.[] 3 SAND 0.6%OM

3.[] 29 SILT 0.8%OM

4.[] 26 SILTY CL LM 3.2%OM

5.[]

6.[]

Rf Factors

1.[]

2.[]

3.[]

4.[]

5.[]

6.[]

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

Aerobic Soil (162-1)

1.[] SOIL NONSTERILE STERILE

2.[#] SiLm 36.5 DAYS 213.8 DAY

3.[#] LOAM 14.7 " 31.3 "

4.[#] SdLm 12.8 " 18.0 "

5.[#] SdLm 10.3 " 21.9 "

6.[]

7.[]

Anaerobic Soil (162-2)

1.[]

2.[]

3.[]

4.[]

5.[]

6.[]

7.[]

Aerobic Aquatic (162-4)

1.[]

2.[]

3.[]

4.[]

Anaerobic Aquatic (162-3)

1.[*] SiLm 9 DAYS

2.[*] SdLm 10 DAYS (LOG PLOT IS NON-

3.[] LINEAR FOR BOTH)

4.[]

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

1/3

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

Page 2

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. ☐

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

Page 3

Common Name: **CHLOROTHALONIL**

Date: 06/28/89

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

3/3