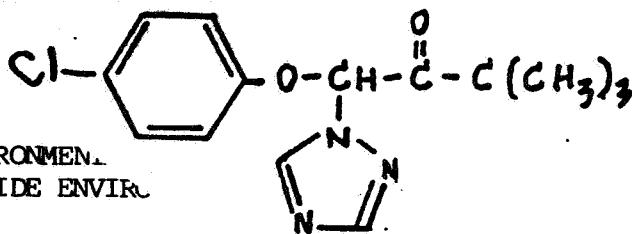


US EPA ARCHIVE DOCUMENT



ENVIRONMENTAL
PESTICIDE ENVIRONMENTAL

Page 1

Common Name: **TRIADIMEFON** Date: 09/21/89
 Chem. Name : 1-(4-CHLOROPHENOXY)-3,3-DIMETHYL-1-(1H-1,2,4-TRIAZOL-1-YL)-2-BUTANONE
 Shaugh. # : 109901 CAS Number: 43121-43-3
 Type Pest. : FUNGICIDE (SYSTEMIC)
 Formulation: WP; EC; SUSP. CONCENTRATE; PASTE; DRY FLOWABLE
 Uses : AGAINST POWDERY MILDEW AFFECTING DECIDUOUS FRUIT, CEREALS AND VEGETABLES; RUST DISEASES OF CEREALS, COFFEE, SEED GRASSES; DISEASES ON SUGARCANE, PINEAPPLE, ORNAMENTALS

Empir. Form: $C_{14}H_{14}ClN_3O_2$ VP (Torr): <E-6
 Mol. Weight: 291.73 Log Kow : 2.99
 Solub.(ppm): 70 @ 20 C Henry's :

| | |
|-----------------------------------|----------------------------|
| Hydrolysis (161-1) | Photolysis (161-2, -3, -4) |
| pH 5:[] | Air :[] |
| pH 7:[] | Soil :[*] STABLE |
| pH 9:[] 95% REMAINS AFTER 28 WKS | Water:[] 10-12 HOURS |
| pH 3:[] 97% " " " " | : [] |
| pH 6:[] 95% " " " " | : [] |
| pH :[] | : [] |

MOBILITY STUDIES (163-1)

| Soil Partition (Kd) | | | | Rf Factors | | | |
|---------------------|----------|------|---------|------------|----------|-----|------|
| 1.[] | s s c | CEC | %OM K | 1.[] | %s, s, c | %OM | Rf |
| 2.[] | 46 36 18 | 27.6 | 3 9.3 | 2.[] | 91 1 1 | 0.8 | 0.27 |
| 3.[] | 4 53 43 | 28.6 | 2.1 3.5 | 3.[] | 74 14 13 | 2.8 | 0.16 |
| 4.[] | 92 7 1 | 26.6 | 3.7 5.9 | 4.[] | 56 21 23 | 0.6 | 0.20 |
| 5.[] | | | | 5.[] | 18 57 25 | 5.1 | 0.26 |
| 6.[] | | | | 6.[] | 0 41 59 | 0.5 | 0.20 |

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

| Aerobic Soil (162-1) | | | | Anaerobic Soil (162-2) | | | |
|----------------------|------|----------|-----------|------------------------|----------------------------|-----------------------|--|
| 1.[] | SOIL | %s, s, c | %OC Tl/2 | 1.[] | SiCl | 15 DAYS (STERILE CON- | |
| 2.[] | SiCl | 0 66 34 | 2.4 6 DA | 2.[] | DITIONS INHIBIT BREAKDOWN) | | |
| 3.[] | SL | 74 16 10 | 17.1 18 " | 3.[] | | | |
| 4.[] | | | | 4.[] | | | |
| 5.[] | | | | 5.[] | | | |
| 6.[] | | | | 6.[] | | | |
| 7.[] | | | | 7.[] | | | |

| Aerobic Aquatic (162-4) | | | | Anaerobic Aquatic (162-3) | | | |
|-------------------------|--|--|--|---------------------------|--|--|--|
| 1.[] | | | | 1.[] | | | |
| 2.[] | | | | 2.[] | | | |
| 3.[] | | | | 3.[] | | | |
| 4.[] | | | | 4.[] | | | |

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

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

Page 2

Common Name: **TRIADIMEFON**

Date: 09/21/89

VOLATILITY STUDIES (163-2,3)

- Laboratory:
 Field:

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

Terrestrial Field (164-1)

| | | | | | | |
|-----------------------------|----------|-----------|-----|--------|----------|---------|
| 1. <input type="checkbox"/> | SOIL | % s, s, c | %OM | | 0-6" | 6-12" |
| 2. <input type="checkbox"/> | FLA.SAND | 88 9 3 | 7.6 | TRIAD. | 5.5 MOS. | 8.7 MOS |
| 3. <input type="checkbox"/> | | | | KWG | 6.0 " | 6.5 " |
| 4. <input type="checkbox"/> | CA fSL | 55 35 10 | 0.5 | TRIAD | 4.5 " | 17 " |
| 5. <input type="checkbox"/> | | | | KWG | 24 " | |
| 6. <input type="checkbox"/> | OR LOAM | 41 45 14 | 4.5 | TRIAD | 8.0 " | 23 " |

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.
2.

Field Rotational Crops (165-2)

1. 1 YR ROTATION FOR SMALL GRAINS, BLACK-EYED PEAS.
2. 1 MONTH ROTATION FOR RADISHES.

Irrigated Crops (165-3)

1.
2.

Fish (165-4)

1. CHANNEL CATFISH, 6.5-7.6 EDIBLE
2.

Non-Target Organisms (165-5)

1. [*] CLOVER PLANTS STUNTED @ 50 PPM; NITROGEN FIXATION
2. BY CLOVER APPARENT AT 10 PPM.

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

Page 3

Common Name: TRIADIMEFON

Date: 09/21/89

GROUND WATER STUDIES (158.75)

1. []
2. []
3. []

DEGRADATION PRODUCTS

1. KWG 0519 (BAYTAN) HAS T_{1/2} IN SOIL OF 9-12 MONTHS
2. TRIAZOLE
3. HYDROXY TRIAZOLE
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

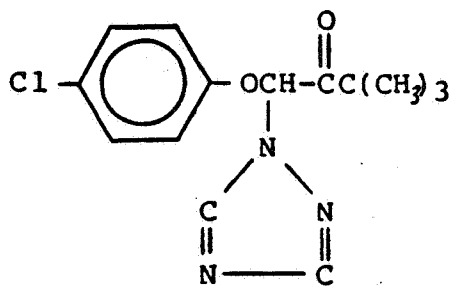
COMMENTS

AGED RESIDUES ARE MODERATELY MOBILE AND HAVE THE POTENTIAL TO LEACH INTO GROUND WATER.

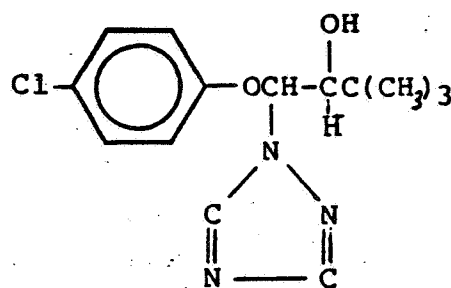
SOIL K_{oc} = 7,100,000 (ESTIMATE).

References:

Writer : J. HANNAN



BAYLETON
[TRIADIMEFON]



KWG 0519
[Bayten]