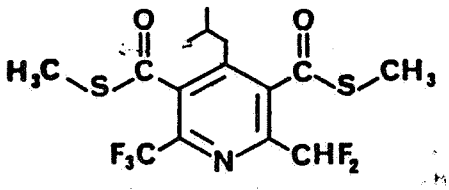


3-1-90

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

Common Name: **DITHIOPYR** Date: 03/01/90
Chem. Name : 3,5-PYRIDINEDICARBOTHIOIC ACID, 2-(DIFLUOROMETHYL)-4-(2-
: METHYLPROPYL)-6-(TRIFLUOROMETHYL)-S,S-DIMETHYL ESTER
Shaugh. # : 128994 CAS Number: ~~97886-45~~-8 97886-45-8
Type Pest. : HERBICIDE
Formulation: 1% GRANULES
Uses : CONTROL OF ANNUAL GRASSES AND ANNUAL BROADLEAF WEEDS IN
: ORNAMENTAL PLANTS, FLOWERS, AND BULBS
:

Empir. Form: $C_{15}H_{16}S_2NO_2F_5$ VP (Torr): 4E-6
Mol. Weight: 401.41 Log Kow : 4.75
Solub.(ppm): 1.4 @ 25°C Henry's :

Hydrolysis (161-1)
pH 5:[*] STABLE
pH 7:[*] STABLE
pH 9:[*] STABLE
pH :[ ]
pH :[ ]
pH :[ ]

Photolysis (161-2, -3, -4)
Air :[ ]
Soil :[#] STABLE, SiLm, ARTIF. SUN
Water:[#] 62 HOURS
:[ ]
:[ ]
:[ ]

MOBILITY STUDIES (163-1)

Soil Partition (Kd)
1.[#] 7 SdLm
2.[#] 8-10 SiLm
3.[#] 27 CLAY
4.[#] 35-65 VOLCANIC ASH LOAMS
5.[ ]
6.[ ]

Rf Factors
1.[ ]
2.[ ]
3.[ ]
4.[ ]
5.[ ]
6.[ ]

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

Aerobic Soil (162-1)
1.[*] 336 DAYS SiLm
2.[*] 490 DAYS CLAY
3.[*] 418 DAYS SdLm
4.[*] 900 DAYS VOLCANIC ASH SOILS
5.[ ]
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.[ ]
2.[ ]
3.[ ]
4.[ ]

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

Common Name: **DITHIOPYR** Date: 03/01/90

VOLATILITY STUDIES (163-2,3)

[ ] Laboratory:
[ ] Field:

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

Terrestrial Field (164-1)
1.[ ]
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.[ ]
2.[ ]

Field Rotational Crops (165-2)
1.[ ]
2.[ ]

Irrigated Crops (165-3)
1.[ ]
2.[ ]

Fish (165-4)
1.[ ]
2.[ ]

Non-Target Organisms (165-5)
1.[ ]
2.[ ]

Common Name: **DITHIOPYR** Date: 03/01/90

GROUND WATER STUDIES (158.75)

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

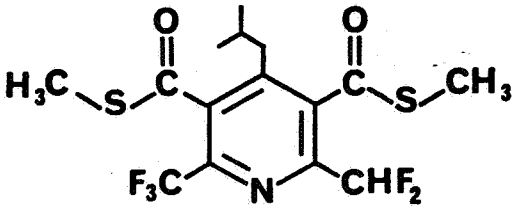
DEGRADATION PRODUCTS

1. NORMAL ACID II COMPRISED 27.3% OF RADIOACT. IN PHOTODEG. STUDY
2. REVERSE ACID III " 14.2% " " " " "
3.
4.
5.
6.
7.
8.
9.
10.

COMMENTS

References: EFGWB REVIEWS
Writer : J. HANNAN

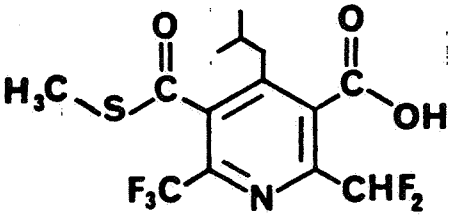
[*] - Acceptable Study. [#] = Supplemental Study



3,5-Pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-,S,S-dimethyl ester

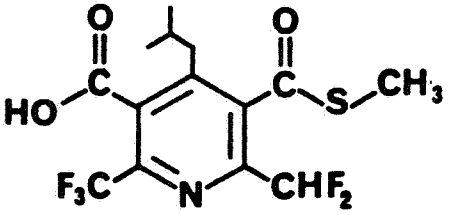
3,5-bis(Methylthiocarbonyl)-2-difluoromethyl-4-(2-methylpropyl)-6-trifluoromethyl pyridine

MON-15151; MON-7200/15100



2-(Difluoromethyl)-4-(2-methylpropyl)-5-[(methylthio)carbonyl]-6-(trifluoromethyl)3-pyridinecarboxylic acid

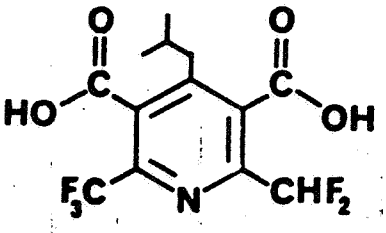
(Normal acid; II)



6-(Difluoromethyl)-4-(2-methylpropyl)-5-[(methylthio)carbonyl]-2-(trifluoromethyl)-3-pyridinecarboxylic acid

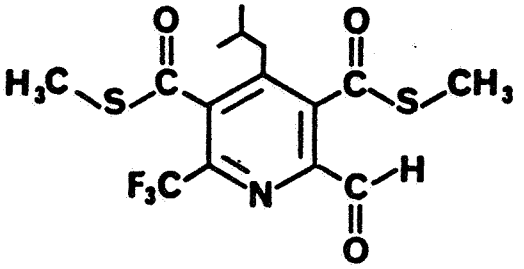
(Reverse acid; III)

5.2



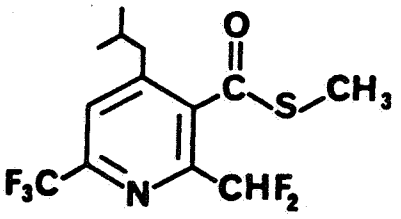
2-(Difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl]-3,5-pyridinedicarboxylic acid

(Diacid; IV)



3,5-bis(Methylthiocarbonyl)-2-formyl-4-(2-methylpropyl)-6-trifluoromethyl pyridine

(V)



3-(Methylthiocarbonyl)-2-difluoromethyl-4-(2-methylpropyl)-6-trifluoromethylpyridine

(VI)