

US EPA ARCHIVE DOCUMENT

Shaughnessy No.: 128201

Date Out of EAB: OCT 20 1986

Signature: 

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10/22/86

To:

Robert Taylor
Product Manager # 25
Registration Division (TS-767)

From:

Emil Regelman, Supervisory Chemist
Review Section #3
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)



Attached, please find the EAB review of...

Reg./File # : 352-EUP - 112, 114, 115

Chemical Name: DPX-Y6202 Ethyl-2-[(4-(6-chloroquinoxalin-2-yloxy)phenoxy]
propanoate

Type Product : Herbicide

Product Name : Assure

Company Name : E.I. duPont de Nemours

Purpose : Registrants response to an EAB review of a 1984 aerobic
soil metabolism study

ACTION CODE: 705;715

EAB #(s) : 5948;5949;5950

Date Received: 9/24/85

TAIS Code: 65

Date Completed: 10/17/86

Total Reviewing Time: 03 day

Monitoring study requested:

Monitoring study voluntarily:

Deferrals to: Ecological Effects Branch
 Residue Chemistry Branch
 Toxicology Branch

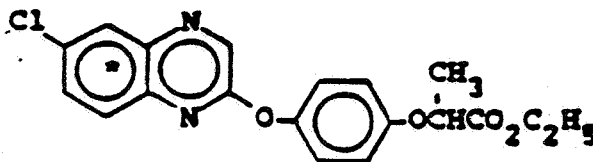
1. CHEMICAL: DPX-Y6202

COMMON NAME: no common name

CHEMICAL NAME: Ethyl-2-[[4-(6-chloroquinoxalin-2-yloxy)phenoxy] propanoate

Trade Name: Assure

Structure:



FORMULATIONS: 10% EC

2. TEST MATERIAL: [^{14}C quinoxaline] and [phenyl- ^{14}C] labeled DPX-Y6202

3. STUDY ACTION TYPE: Registrant's response to EAB review of 1984 aerobic soil metabolism study to satisfy requirements for EUPs. (Fallow, Soybean, and Cotton)

4. STUDY IDENTIFICATION: (Reviewed in EAB Action # 5669 - 12/23/85)

Cadwan, G.E. and R.D. McFetridge. 1985. Aerobic soil metabolism of [phenyl- ^{14}C (U)] DPX-Y6202. E. I. duPont de Nemours and Co., Inc., Agri. Chemicals Div., Wilmington, DE, Report No. AMR-329-85; exhibit 46

5. REVIEWED BY:
John Jordan
Microbiologist
EAB/HED/OPP

Signature: John Jordan
Date: October 17, 1986

6. APPROVED BY:
Emil Regelman
Supervisory Chemist
Review Section # 3
EAB/HED/OPP

Signature: Emil Regelman
Date: OCT 20 1986

7. CONCLUSIONS:

The 1984 aerobic soil metabolism study (see Background) by Cadwan-AMR-200-84 was unacceptable, however, the 1985 Cadwan study, AMR-329-85 (see Section 4) satisfied this requirement for silt loam and sandy loam soils.

The following data are still required to support the proposed EUPs: confined rotation crop, aerobic soil metabolism (on clay and clay loam soil types), and mobility/leaching (soil column) for major degradates on clay and clay loam soils.

The following additional data will be required for full registration of DPX-6202 for the proposed use sites:

Soil photolysis
Anaerobic soil metabolism
Volatility (lab).

Data may also be required to satisfy the following, depending on the results of the laboratory tests:

Field Crop Rotation
Volatility (field).

8. RECOMMENDATIONS:

EAB cannot concur with the proposed EUPs on soybeans, cotton and fallow land at this time. Data must be submitted to address the deficiencies listed in the conclusion.

The unacceptable 1984 study may be withdrawn without prejudice.

9. BACKGROUND:

The following 1984 study is not acceptable. However, since the 1985 study in Section 4 meets aerobic soil metabolism requirements, it may be withdrawn without prejudice.

Cadwan, G.E. 1984. Aerobic Soil Metabolism of [¹⁴C-quinoxaline-Labeled] DPX-Y6202. Doc. No. AMR-200-84, Rev. No. 1 (Co. Confidential), Res.Div. Agri. Chem. Dept., E.I. duPont de Nemours, 8/15/84. 15 pps., 10 tables, 19 figures. No references.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: The 1985 Cadwan study had been previously reviewed on 12/23/85 (EAB # 5669) and found acceptable, and the current submission contained responses to deficiencies in the 1984 study which do not require consideration.

The acceptable 1985 Cadwan study described the aerobic degradation of DFX-6202 in a sandy loam and silt loam soil. It also contains a materials balance, a half-life estimate of about one week and a description of the major degradates formed. The major pathway of degradation is mineralization of the phenyl ring to CO₂ which occurred after ten or more weeks of aging.

11. COMPLETION OF ONE-LINER: One-liner not completed as of this date.
12. CBI APPENDIX: The registrant considers the hard copy as CBI, therefore, it should be consider as confidential.