

US EPA ARCHIVE DOCUMENT

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MEMORANDUM:

**Subject:** Product Chemistry Review on Etofenprox  
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**Thru:** *as for HP*  
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**Applicant:** Mitsui Toatsu Chemicals Inc.

**DP BARCODE:** D211334

**MRID No.:** 435190-01

**Pesticide Chemical Code No.:** 128965

**Company Code No.:** 033657

**Chemical Name:** 2-(4-Ethoxyphenyl)-2-methylpropyl-3-  
phenoxybenzyl ether

**Trade Name:** Etofenprox

**Introduction:** This is a supplementary review. Refer to original reviews dated 5/21/90 and 3/6/89 by T. Alston and supplementary review dated 12/6/94 by B. Gandhi. This review only concerns the analytical method used to determine the impurities present in Etofenprox Technical.

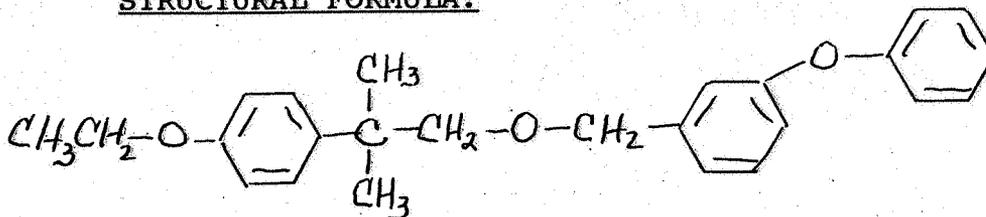
SERIES 61: PRODUCT IDENTITY AND COMPOSITION

61-1 Product Identity and Disclosure of Ingredients

CAS REGISTRY NUMBER: 80844-07-1

MOLECULAR WEIGHT: 376.46

STRUCTURAL FORMULA:



SERIES 62: ANALYSIS AND CERTIFICATION OF PRODUCT INGREDIENTS

62-3 Analytical Methods to Verify Certified Limits

Additional information was submitted in MRID No. 435190-01 for the determination of the impurities in Etofenprox Technical. The same GLC analytical method previously submitted in MRID No. 434521-01 for the determination of Etofenprox Technical was used to analyze the impurities in the technical product. The analytical method is acceptable and no additional information is required. Typical analyses for the impurities present in Etofenprox Technical are reported in Confidential Appendix A.

CONCLUSIONS AND RECOMMENDATIONS

SERIES 62: ANALYSIS AND CERTIFICATION OF PRODUCT INGREDIENTS

The analytical method for the determination of the impurities in Etofenprox Technical as reported in MRID No. 435190-01 is acceptable and no additional information is required. The data fulfill the requirements of 40 CFR §158.180 as an enforcement analytical method for the determination of the impurities in Etofenprox Technical.

CONFIDENTIAL APPENDIX A

62-3: ANALYTICAL METHODS TO VERIFY CERTIFIED LIMITS

Data were submitted in MRID No. 435190-01 which provide information for the determination of the impurities in Etofenprox Technical. The levels of impurities which may be unreacted starting materials are determined by the same GLC analytical method as used for the parent compound Etofenprox previously submitted in MRID No. 434521-01.

Etofenprox is dissolved in Cyclohexane containing Dicyclohexyl phthalate as an internal standard and is determined by GLC using a flame ionization detector. Sample chromatograms showing retention times for the impurities have been provided and are summarized as follows:

<u>IMPURITY</u>	<u>PERCENTAGE</u>
2-(3-Chloro-4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether	0.29%
1-(4-Ethoxyphenyl)-2-methyl -2-propyl-3-phenoxybenzyl ether	0.37%
2-(4-Ethoxyphenyl)-2-methylpropane-1-ol	0.22%
3-Phenoxytoluene	0.49%

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