US EPA ARCHIVE DOCUMENT

DATA EVALUATION RECORD

1. CHEMICAL: Metolachlor (108801)

2. FORMULATION: Technical

3. CITATION: Arnie, P., Muller, D., (1976) Samonella/Mammalian Microsome Mutagenicity Test with CGA-24705 (Unpublished Report Prepared by CIBA-GEIGY Ltd., Basle, Switzerland)

4. TRADE SECRET CLAIM: Yes

5. REASON FOR REVIEW: Generic Standard for Metolachlor

6. REVIEWED BY: Christine F. Chaisson
   Biochemist, Metabolic Effects Branch
   Criteria and Evaluation Division

7. DATE OF REVIEW: January 12, 1978

8. TEST TYPE: Mutagenicity

   A. Materials and Methods: The bacteria Salmonella typhimurium, strains TA-1535, TA-1537, TA-98 and TA-100, were tested for mutagenicity using the Ames Standard Plate Test and Spot Test with and without liver microsomal activation. Levels of 10, 100, 1000 and 10,000 ug/0.1 ml to each plate were used. Significant results were defined as a doubling of the mutation rate above background.

   B. Reported Results: In applications of 10, 100, 1000 and 10,000 ug/0.1 ml to each plate, cell death was noted at the highest two levels but no increase over background was observed in reversion to prototrophy. Metolachlor can be considered non-mutagenic in this test system.

   C. Discussion: The results are justified.

   D. Conclusions: The study indicates that metolachlor, with or without activation is non-mutagenic to four strains of S. typhimurium at all levels tested including toxic levels. The test would meet proposed requirements for one type of mutagenicity testing.