



Contains NO CBI

TOXICOLOGY DEPARTMENT  
P.O. BOX 12014, 2 T.W. ALEXANDER DRIVE  
RESEARCH TRIANGLE PARK, NC 27709  
(919) 549-2000 TELEFAX (919) 549-8525  
INTERNATIONAL TELEX NUMBER 4999378-ANSWERBACK APC RTP

92 OCT 13 AM 8:19

October 5, 1992



CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

8EHQ-92-12123  
INIT  
88920010361

Document Processing Center (TS-790)  
Office of Toxic Substances  
US Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460

Attn: Section 8(e) Coordinator (CAP Agreement)

RE: Report Submitted Pursuant to the TSCA Section 8(e) Compliance Audit Program

CAP ID No.: 8ECAP - 0004

Dear Sir/Madam:

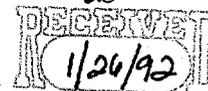
On behalf of Rhône-Poulenc Inc. (RPI, CN 5266, Princeton, NJ 08543-5266) and its subsidiary Rhône-Poulenc Ag Company, the attached study report is being submitted to the Environmental Protection Agency (EPA) pursuant to the Toxic Substances Control Act (TSCA) Section 8(e) Compliance Audit Program and the Agreement for a TSCA Section 8(e) Compliance Audit Program (CAP Agreement) executed by RPI and EPA.

The enclosed study report provides information on MC 2148. The CAS number and name for this chemical are 26662-09-9 and phosphoric acid, diethyl ester, ester with 4-hydroxy-6-methyl-2H-pyran-2-one. This chemical was synthesized for pesticide research and development approximately 15 to 20 years ago. To our knowledge, a pesticide application on this chemical has never been submitted to EPA under the Federal Insecticide, Fungicide, and Rodenticide Act.

No claims of confidentiality are made for this submission. The title of the enclosed report is "Acute Oral Toxicity Study in Rats with Mobil Chemical Company's Compound Identified as MC 2148". The following is a summary of the adverse effects observed in this study.

This study is being submitted under Section 8(e) because the oral LD50 was determined to be 3.34 mg/kg. Thus, based upon EPA's criteria under TSCA Section 8(e), this compound would be classified as extremely toxic. Clinical signs prior to death included deep, rapid breathing followed by gasping, tremors, and uncoordinated head and body movements.

No previous TSCA Section 8(e) notices have been submitted on this chemical. In total, RPI is submitting three copies of the enclosed report and this cover letter: an original and two copies.



9

Further questions regarding this submission may be directed to the undersigned at 919-549-2222.

Sincerely,



Glenn S. Simon, PhD, DABT  
Director of Toxicology



PRINCETON PIKE, P. O. BOX 57

PRINCETON, N. J. 08540

TEL.: (609) 924-9658

Project #20-202

Acute Oral Toxicity Study in Rats with  
Mobil Chemical Company's Compound Identified as MC 2148

Conducted for

Mobil Chemical Company  
Metuchen, New Jersey

Submitted by

AME Associates  
Princeton, New Jersey

A. M. E. ASSOCIATES P.O. BOX 57 PRINCETON, N. J. 08540

April 18, 1967

PROJECT #20-202

SPONSOR: MOBIL CHEMICAL COMPANY

SUBJECT: Acute Oral Toxicity Study in Rats with Mobil Chemical Company's Compound Identified as MC 2148

OBJECTIVE

To study the acute oral toxicity in rats of Mobil Chemical Company's compound identified as MC 2148 when administered by means of a stomach catheter.

MATERIAL

Compound MC 2148 supplied by Mobil Chemical Company for use in this study.

PROCEDURE

An approximation of the LD<sub>50</sub> was attained by administering the chemical compound to a number of rats on each of several levels. Following this a group of twenty young adult, male albino rats of the Sprague-Dawley Strain weighing approximately 200-250 grams was selected for use in this study. The animals were divided into four subgroups of five animals each and fasted for twenty-four hours prior to dosing.

-2-

The experimental material was placed in a syringe and introduced through the esophagus into the stomach with a stainless steel catheter.

Five rats were dosed at 1.56 mg/kg level with a .1% v/v suspension in corn oil (i.e., 1 ml in 1000 ml). Five rats were dosed at 3.125 mg/kg level, five at 6.25 mg/kg level, and five at 12.5 mg/kg level with a .25% v/v suspension in corn oil (i.e., 1 ml in 400 ml).

Animals on the same dosage level were then placed in a common cage with free access to food and water. The cages employed had wire mesh floors elevated above the droppings and were kept in temperature controlled rooms at  $72^{\circ} \text{F} \pm 2^{\circ} \text{F}$ . Light was furnished for eight out of every twenty-four hour period.

The animals were observed for a twenty-one day period and deaths were recorded.

The  $\text{LD}_{50}$  was calculated using the Thompson Moving Average Method (Biometrics, September, 1952, Vol. 8, No. 3).

-3-

RESULTS

Dosage mg/kg	No. of Animals	<u>Number and Days of Death</u>														Total	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	S*	D**
1.56	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
3.125	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	2
6.25	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
12.5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

\*Survivors    \*\*Deaths

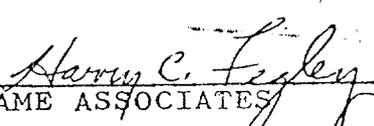
OBSERVATIONS

Immediately following dosing the animals on the two higher levels appeared depressed. Ten to fifteen minutes later the rats showed deep, rapid breathing followed by gasping, tremors of muscles, and uncoordinated head and body movements. All the rats at 12.5 mg/kg died within forty-five minutes of dosing; of the rats at 6.25 mg/kg three rats died within one hour of dosing, the remaining two were dead by the following day.

CONCLUSIONS

The oral LD<sub>50</sub> of Mobil Chemical Company's MC 2148 is 3.34 mg/kg with 95% confidence limits of 2.38 mg/kg to 4.69 mg/kg.

SUBMITTED BY


  
 HARRY C. FEGLEY
AME ASSOCIATES  
Harry C. Fegley, W.M.D.

Triage of 8(e) Submissions

Date sent to triage: MAY 09 1995

NON-CAP

CAP

Submission number: 12123A

TSCA Inventory:

Y

N

D

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO

AQUATO

Group 2 - E nie Falke (1 copy total)

ATOX

SBTOX

SEN

w/NEUR

Group 3 - Elizabeth Margosches (1 copy each)

STOX

CTOX

EPI

RTOX

GTOX

STOX/ONCO

CTOX/ONCO

IMMUNO

CYTO

NEUR

Other (FATE, EXPO, MET, etc.): \_\_\_\_\_

Notes:

**THIS IS THE ORIGINAL 8(e) SUBMISSION; PLEASE REFILE AFTER TRIAGE DATABASE ENTRY**

For Contract: Use Only	
entire document: <u>0</u> 1 2 pages <u>1, 2</u>	pages <u>1, 2, TAB</u>
Notes:	
Contractor reviewer: <u>FOR</u>	Date: <u>4/26/95</u>

CECATS DATA: SEHO 192-1213 SEQ A

TYPE: INT SUPP FLWP

SUBMITTER NAME: Rhone-Poulenc Inc

INFORMATION REQUESTED: FLWP DATE: \_\_\_\_\_  
 0901 NO INFO REQUESTED  
 0902 INFO REQUESTED (TEC1)  
 0903 INFO REQUESTED (VOL ACTIONS)  
 0904 INFO REQUESTED (REPORTING RATIONALE)  
 DISPOSITION:  
 0502 REFER TO CHEMICAL SCREENING  
 0503 CAP NOTICE

VOLUNTARY ACTIONS:  
 0401 NO ACTION REPORTED  
 0402 STUDIES PLANNED/IN PROGRESS  
 0403 NOTIFICATION OF WORKING STATUS  
 0404 LABEL AMENDS (TIANG'S)  
 0405 PROTECTAMANDI INC. (TIANG'S)  
 0406 APP USE DISCONTINUED  
 0407 PRODUCTION DISCONTINUED  
 0408 CONFIDENTIAL

SUB DATE: 10/05/92 OTS DATE: 10/13/92 CRAD DATE: 01/26/93

CHEMICAL NAME:

Phosphoric acid, diethyl ester, ester with 4-hydroxy-6-methyl-2H-pyran-2-one

CASE

26662-09-9

INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C
0201 ONCO (HUMAN)	01 02 04	0216 ERYCLEN	01 02 04	0241 BAMBINO (ANIMAL)	01 02 04
0202 ONCO (ANIMAL)	01 02 04	0217 HUMAN EXPOS (PROD CONTAM)	01 02 04	0242 BAMBINO (HUMAN)	01 02 04
0203 CELL TRANS (IN VITRO)	01 02 04	0218 HUMAN EXPOS (ACCIDENTAL)	01 02 04	0243 CHEM/PHYS PROP	01 02 04
0204 MUTA (IN VITRO)	01 02 04	0219 HUMAN EXPOS (MONITORING)	01 02 04	0244 CLASTO (IN VITRO)	01 02 04
0205 MUTA (IN VIVO)	01 02 04	0220 BOD/WATER TOX	01 02 04	0245 CLASTO (ANIMAL)	01 02 04
0206 REPRO/TERATO (HUMAN)	01 02 04	0221 ENV OCCURREN/FATE	01 02 04	0246 CLASTO (HUMAN)	01 02 04
0207 REPRO/TERATO (ANIMAL)	01 02 04	0222 ENER ENCI OF ENV CONTACT	01 02 04	0247 DNA DAM/REPAIR	01 02 04
0208 NEURO (HUMAN)	01 02 04	0223 RESPONSE ROBUST DELAY	01 02 04	0248 PROD/USE/PROC	01 02 04
0209 NEURO (ANIMAL)	01 02 04	0224 PRODCOM/PHYSM ID	01 02 04	0251 MSIDS	01 02 04
0210 ACTUTE TOX. (HUMAN)	01 02 04	0225 REPORTING RATIONALE	01 02 04	OTHER	01 02 04
0211 CHR. TOX. (HUMAN)	01 02 04	0226 CONFIDENTIAL	01 02 04		
0212 ACTUTE TOX. (ANIMAL)	01 02 04	0227 ALLERG (HUMAN)	01 02 04		
0213 SUB ACUTE TOX (ANIMAL)	01 02 04	0228 ALLERG (ANIMAL)	01 02 04		
0214 SUB CHRONIC TOX (ANIMAL)	01 02 04	0229 METAPHARMACOD (ANIMAL)	01 02 04		
0215 CHRONIC TOX (ANIMAL)	01 02 04	0230 METAPHARMACOD (HUMAN)	01 02 04		

TRACKING DATA: NON-CELL INVENTORY ONGOING REVIEW: SPECIES RAT TOXICOLOGICAL CONCERN: LOW MED HIGH USE: R+D Peptides PRODUCTION:

CAS SR NO YES NO (CONTINUE)

IN T R A N S I T

HIGH

-CPSS- 0927952113

0 0 0 0 0 0 0 0 0 0 0

> <ID NUMBER>

8(E)-12123A

> <TOX CONCERN>

H

> <COMMENT>

ACUTE ORAL TOXICITY IN MALE RATS IS HIGH CONCERN BASED ON AN LD50 OF 3.34 MG/KG. DOSE (MG/KG) AND MORTALITY: 1.56 (0/5), 3.125 (2/5), 6.25 (5/5), AND 12.5 (5/5). CLINICAL SIGNS INCLUDED DEEP, RAPID BREATHING; GASPING; TREMORS; AND UNCOORDINATED BODY AND HEAD MOVEMENTS.

\$\$\$\$