

8E HQ-1194-13246

PUBLIC COPY

(A)

November 7, 1994

8E HQ-94-13246
INIT
88950000036

Express Mail - Return Receipt Requested

Document Processing Center (TS-790)
Attention 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460

COMPANY SANITIZED

Dear 8(e) Coordinator:

This letter is to inform you of the results of an acute inhalation study we recently conducted with the materials listed below.

Ethane, 1-chloro-2-fluoro-
CAS Registry Number 762-50-5

Three rats per group were exposed to the test material by inhalation. Exposure to atmospheric concentrations of approximately 140, 45 or 13 ppm for four hours were lethal to all rats. Most of the deaths were delayed, up to three days after the end of the exposure. Convulsions were observed in a rat during an exposure to approximately 140 ppm. Rats exposed to approximately 7 ppm of the test material for four hours had no observable effects and appeared normal up to seven days post-exposure.

Ethane, 1-bromo-2-fluoro-
CAS Registry Number 762-49-2

Three rats per group were exposed to the test material by inhalation. Exposure to atmospheric concentrations of approximately 40 or 11 ppm for four hours were lethal to all rats. Most of the deaths were delayed, up to two days after the end of the exposure. Convulsions were observed in a rat during an exposure to approximately 11 ppm. Rats exposed to approximately 5 ppm of the test material for four hours had no observable effects during the exposure, but one rat had a convulsion approximately 2 hours after the exposure ended. All rats exposed to approximately 5 ppm survived, and appeared normal seven days post-exposure.

RECEIVED
NOV 10 1994
EPA

The effects described above are being reported in accordance with the guidance given in the EPA TSCA Section 8(e) Reporting Guide (June, 1991). The compounds are research chemicals, and the exposure is extremely limited. We are claiming [red bracket] the company name as confidential business information.

Sincerely,

mm
12/15/94

Triage of 8(e) Submissions

Date sent to triage: APR 04 1995

NON-CAP

CAP

Submission number: 13246A

TSCA Inventory: Y N D

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO AQUATO

Group 2 - Ernie 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 Contractor Use Only	
entire document: <u>0</u> 1 2 pages _____	pages <u>1</u>
Notes: <u>Red Dot (Ack. letter sent).</u>	
Contractor reviewer: <u>LPS</u>	Date: <u>1/20/95</u>

CECATS DATA: Submission # BEHO-1194-13246 ⁵ Seq. A

TYPE: INT: SUPP FLWP

SUBMITTER NAME: Confidential

INFORMATION REQUESTED: FLWP DATE:
 0501 NO INFO REQUESTED
 0502 INFO REQUESTED (TECH)
 0503 INFO REQUESTED (VOL ACTIONS)
 0504 INFO REQUESTED (REPORTING RATIONALE)
DISPOSITION:
 0603 REFER TO CHEMICAL SCREENING
 0678 CAP NOTICE

SUB DATE: 11/07/94 OTR DATE: 11/09/94 CSRAD DATE: 12/15/94

CHEMICAL NAME: Ethane, 1-chloro-2-fluoro-
Ethane, 1-bromo-2-fluoro-

CASE #

762-50-5

762-49-2

INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C
0201 ONCO (HUMAN)	01 02 04	0216 EPICLIN	01 02 04	0241 IMMUNO (ANIMAL)	01 02 04
0202 ONCO (ANIMAL)	01 02 04	0217 HUMAN EXPOS (PROD CONTAM)	01 02 04	0242 IMMUNO (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 ECOAQUA TOX	01 02 04	0245 CLASTO (ANIMAL)	01 02 04
0206 REPRO/TERATO (HUMAN)	01 02 04	0221 ENV. OCCUREL/FATE	01 02 04	0246 CLASTO (HUMAN)	01 02 04
0207 REPRO/TERATO (ANIMAL)	01 02 04	0222 EMER INCI OF ENV CONTAM	01 02 04	0247 DNA DAM/REPAIR	01 02 04
0208 NEURO (HUMAN)	01 02 04	0223 RESPONSE REOEST DELAY	01 02 04	0248 PROD/USE/PROC	01 02 04
0209 NEURO (ANIMAL)	01 02 04	0224 PROD/COMP/CHEM ID	01 02 04	0251 MSDS	01 02 04
0210 ACUTE TOX. (HUMAN)	01 02 04	0225 REPORTING RATIONALE	01 02 04	0299 OTHER	01 02 04
0211 CHR. TOX. (HUMAN)	01 02 04	0226 CONFIDENTIAL	01 02 04		
0212 ACUTE 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 METAB/PHARMACO (ANIMAL)	01 02 04		
0215 CHRONIC TOX (ANIMAL)	01 02 04	0240 METAB/PHARMACO (HUMAN)	01 02 04		

TRIAGE DATA: NON-CBI INVENTORY

YES YES (DROPPED/REFER)

CAS SR NO NO (CONTINUE)

SPECIES: RAT

TOXICOLOGICAL CONCERN: LOW

USE: Research

PRODUCTION:

11K.11

-CPSS-

> <ID NUMBER>
8(E)-13246A

> <TOX CONCERN>
H

> <COMMENT>
ETHANE, 1-CHLORO-2-FLUORO-: ACUTE INHALATION TOXICITY IN RATS IS OF HIGH CONCERN DUE TO SIGNS OF NEUROTOXICITY AND LETHALITY. ALL RATS (3 RATS/GROUP) EXPOSED FOR 4 HOURS TO ATMOSPHERIC CONCENTRATIONS OF APPROXIMATELY 140, 45 OR 13 PPM DIED. MOST MORTALITIES OCCURRED DURING POST-EXPOSURE OBSERVATION, UP TO 3 DAYS LATER. CLINICAL EFFECTS INCLUDED CONVULSIONS IN ONE RAT EXPOSED TO 140 PPM. RATS EXPOSED TO 7 PPM APPEARED NORMAL THROUGHOUT EXPOSURE AND OBSERVATION PERIODS.

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ETHANE, 1-BROMO-2-FLUORO-: ACUTE INHALATION TOXICITY IN RATS IS OF HIGH CONCERN DUE TO SIGNS OF NEUROTOXICITY AND LETHALITY: ALL RATS (3 ANIMALS/GROUP) EXPOSED FOR 4 HOURS TO ATMOSPHERIC CONCENTRATIONS OF APPROXIMATELY 40 OR 11 PPM DIED. ONE RAT OF THE 11 PPM EXPOSURE GROUP CONVULSED. ALL RATS EXPOSED FOR 4 HOURS TO 5 PPM SHOWED NO OVERT EFFECTS EXCEPT ONE THAT SUFFERED CONVULSIONS 2 HOURS POST-EXPOSURE. ALL RATS SURVIVED A 5 PPM EXPOSURE AND APPEARED NORMAL 7 DAYS LATER.

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