8EHQ-96-13639
INIT 04/30/96

8EHQ-0596-13639

The Dow Chemical Company
Midland, Michigan 48674

2030 DOW CENTER
April 22, 1996

88960000119

CERTIFIED MAIL--
RETURN RECEIPT REQUESTED

ENTIAL
TION

96 APR 30 PM 2:35
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OPPT NCIC

Document Processing Center (TS-790)
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460
Attn: 8(e) Coordinator

ORIGINAL

Re: Methoxypropionic Acid, a metabolite of certain propylene glycol ethers

Dear Sir/Madam:

The following information is being submitted by The Dow Chemical Company (Dow) pursuant to current guidance issued by EPA indicating EPA's interpretation of Section 8(e) of the Toxic Substance Control Act. Dow has made no determination as to whether a significant risk of injury to health or the environment is actually presented by the findings.

In a developmental toxicity study using New Zealand White Rabbits, the test material was administered via oral gavage once daily on gestation day 7 to 19 at concentrations of 0, 10, 26, or 78 mg/kg/day. Each group consisted of 20 artificially inseminated adult rabbits. The test material at 78 mg/kg/day resulted in maternal toxicity, evidenced by decrease feed consumption, decreased body weights and body weight gains and increased absolute/relative kidney weights. The test material at 26 mg/kg/day also was maternally toxic, causing decreased body weight gains. No significant maternal effects were noted at 10 mg/kg/day. Developmental toxicity effects consisted of an increased resorption rate, a significant increase in the overall incidence of litters with malformed fetuses, and significant increases in the incidence of several fetal variations (retrocaval ureter, irregular pattern of sternebrae ossification and delayed ossification of the forelimb phalanges, hyoid and talus bones). There was no evidence of developmental toxicity at 26 or 10 mg/kg/day.

No written report of these results is yet available.

Sincerely,

Paul A. Wright
Senior Attorney
Legal Department
517/636-1853

Contains No CBI

RECEIVED
7/11/96

96 MAY -9 AM 11:45
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Triage of 8(e) Submissions

Date sent to triage:_____ NON-CAP CAP

Submission number: 13639 A TSCA Inventory: Y N D

Study type (circle appropriate):

Group 1 - Gordon Cash (1 copy total)

ECO AQUATO

Group 2 - Ernie Falke (1 copy total)

ATOX SBTOX SEN w/NEUR

Group 3 -HERD (1 copy each)

STOX	CTOX	EPI	RTOX	GTOX
STOX/ONCO	CTOX/ONCO	IMMUNO	CYTO	NEUR

Other (FATE, EXPO, MET, etc.):_____

Notes:

- [x] This is the **original** 8(e) submission; refile after triage evaluation.
- [ ] This **original** submission has been **split**; rejoin after triage evaluation.
- [ ] Other:

Photocopies Needed for Triage Evaluation

entire document: 0 1 2 3

front section and CECATS: 0 1 2 3

Initials:_____ **Date:**_____

Submission # 8EHQ-0516-13637 SEQ. 14

TYPE: INT SUPP FLWP

SUBMITTER NAME: Dow Chemical Company

INFORMATION REQUESTED: FLWP DATE:
0501 NO INFO REQUESTED
0502 INFO REQUESTED (TECH)
0503 INFO REQUESTED (VOL ACTIONS)
0504 INFO REQUESTED (REPORTING RATIONALE)

DISPOSITION:
0639 REFER TO CHEMICAL SCREENING
0678 CAP NOTICE

VOLUNTARY ACTIONS:
0401 NO ACTION REPORTED
0402 STUDIES PLANNED/UNDERWAY
0403 NOTIFICATION OF WORKER/OTHERS
0404 LABEL/MSDS CHANGES
0405 PROCESS/HANDLING CHANGES
0406 APP./USE DISCONTINUED
0407 PRODUCTION DISCONTINUED
0408 CONFIDENTIAL

SUB. DATE: 04/22/96 OTS DATE: 04/30/96 CSRAD DATE: 07/11/96

CHEMICAL NAME: Methoxypropionic Acid

CAS# ~~unknown~~ 38094-42-7 - per CAS ONLINE

INFORMATION TYPE:		P F C
0201	ONCO (HUMAN)	01 02 04
0202	ONCO (ANIMAL)	01 02 04
0203	CELL TRANS (IN VITRO)	01 02 04
0204	MUTA (IN VITRO)	01 02 04
0205	MUTA (IN VIVO)	01 02 04
0206	REPRO/TERATO (HUMAN)	01 02 04
0207	REPRO/TERATO (ANIMAL)	01 02 04
0208	NEURO (HUMAN)	01 02 04
0209	NEURO (ANIMAL)	01 02 04
0210	ACUTE TOX. (HUMAN)	01 02 04
0211	CHR. TOX. (HUMAN)	01 02 04
0212	ACUTE TOX. (ANIMAL)	01 02 04
~~0213~~	SUB ACUTE TOX (ANIMAL)	~~01 02 04~~
0214	SUB CHRONIC TOX (ANIMAL)	01 02 04
0215	CHRONIC TOX (ANIMAL)	01 02 04

INFORMATION TYPE:		P F C
0216	EPI/CLIN	01 02 04
0217	HUMAN EXPOS (PROD CONTAM)	01 02 04
0218	HUMAN EXPOS (ACCIDENTAL)	01 02 04
0219	HUMAN EXPOS (MONITORING)	01 02 04
0220	ECO/AQUA TOX	01 02 04
0221	ENV. OCCC/REL/FATE	01 02 04
0222	EMER INCI OF ENV CONTAM	01 02 04
0223	RESPONSE REQEST DELAY	01 02 04
0224	PROD/COMP/CHEM ID	01 02 04
0225	REPORTING RATIONALE	01 02 04
0226	CONFIDENTIAL	01 02 04
0227	ALLERG (HUMAN)	01 02 04
0228	ALLERG (ANIMAL)	01 02 04
0239	METAB/PHARMACO (ANIMAL)	01 02 04
0240	METAB/PHARMACO (HUMAN)	01 02 04

INFORMATION TYPE:		P F C
0241	IMMUNO (ANIMAL)	01 02 04
0242	IMMUNO (HUMAN)	01 02 04
0243	CHEM/PHYS PROP	01 02 04
0244	CLASTO (IN VITRO)	01 02 04
0245	CLASTO (ANIMAL)	01 02 04
0246	CLASTO (HUMAN)	01 02 04
0247	DNA DAM/REPAIR	01 02 04
0248	PROD/USE/PROC	01 02 04
0251	MSDS	01 02 04
0299	OTHER	01 02 04

TRIAGE DATA:	NON-CBI INVENTORY	ONGOING REVIEW	SPECIES	TOXICOLOGICAL CONCERN:	USE:	PRODUCTION:
CAS SR	YES	YES (DROP/REFER)	RBT	LOW		
	NO	NO (CONTINUE)		MED		
	DETERMINE	REFER		HIGH		

COMMENTS

Developmental Toxicity

4 groups of 20 given 0, 10, 26, 78 mg/kg/d via garage GD 7-19.

NOAEL = 10 mg/kg/d ← Maternal Toxicity: At 78 mg/kg/d ↓ food consumpt, ↓ body wts, & body wt gains, ↓ abs/relative kidney wt.

NOAEL = 26 mg/kg/d ← At 26 mg/kg/d, ↓ body wt gain

Developmental Tox: ↑ resorptions, malformations, variation delayed ossification at 78 mg/kg/d