



8EHQ-96-13621
INIT 04/12/96

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The Dow Chemical Company
Midland, Michigan 48674

2030 DOW CENTER
April 8, 1996

Contains No CBI

CONTAINS NO CONFIDENTIAL
BUSINESS INFORMATION

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

A
ORIGINAL

Re: 1,3-dimethyl-2-imidazolidinone (DMI) -- CAS Number: 80-73-9

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.

Preliminary, unaudited results from a dermal teratology study (in which the material was administered for 6 hours/day on gestation days 6 to 15 at 0, 10, 100, and 400 mg/kg/day) indicate a statistically significant decrease in gravid uterine weight and fetal body weight at the 400 mg/kg/day dose level. These parameters were not affected at the 100 or 10 mg/kg/day dose groups. Maternal body weights were significantly decreased at 400 mg/kg/day during gestation days 16-21. Body weight gains of the female rats given 400 mg/kg/day were also statistically decreased on days 6-9, 9-12, 12-16, 0-21 and 6-16. At 100 mg/kg/day, body weight gains were statistically lower than the controls during the treatment period (days 6-16) and days 19-21 of gestation. No effects on maternal body weights or body weight gains were observed at 10 mg/kg/day.

It is likely that the effect on gravid uterine weight and fetal body weight observed at 400 mg/kg/day was secondary to a decreased maternal body weight gain noted at this exposure level and not a direct effect of the test chemical. DMI is not a selective developmental toxicant since the maternal NOEL of 10 mg/kg/day is lower than the developmental NOEL of 100 mg/kg/day.

No written report of this study is yet available.

Sincerely,

Paul A. Wright

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



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RECEIVED
8/15/96