

7YI-0794-1158



RECEIVED
OPPT CBIC

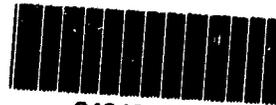
94 JUL 26 PM 3:31



FYI-94-001158
INIT 07/26/94

March 5, 1984

Mr. Louis Borghi
Staff Scientist
Dynamac Corporation
The Dynamac Building
11140 Rockville Pike
Rockville, MD 20852



84940000230

Contains No CBI

Dear Mr. Borghi:

The following is in response to your request for information on the chemical CAS No. 56046-62-9: N-[2-[ethyl(3-methyl-4-nitrosophenyl)amino]ethyl]methanesulfonamide (NEMSET).

Attached is a copy of a letter to Mr. Martin Greif that will address most of the questions stated in your recent request. Production data, a process description, physical/chemical properties of NEMSET, and a discussion of occupational exposure and environmental release are provided. In regards to your question about the use of the end-product chemical that NEMSET is used to produce, we know of no application in the instant photography market that uses this end-product chemical.

We will separately respond to your question on health and safety data.

In concluding, we hope the attached information is useful in your evaluation of this chemical. We would appreciate it if you would send me a copy of the addendum to the Information Review as we discussed. If we can provide additional assistance to you, please contact me at (716) 722-4740 or Mr. Paul Lytle at (716) 722-4748.

Sincerely,

Lee Clem

Mr. Lee H. Clem
Environmental Technical Services
Health and Environment Laboratories

LHC/PEL:drc
Attachment

0003

February 21, 1984

Mr. Martin Greif
Executive Secretary (TS-792)
Toxic Substances Control Act Interagency Testing Committee
401 M Street, SW
Washington, DC 20460

SUBJECT: IR-366

Dear Mr. Greif:

Eastman Kodak Company would like to submit additional information on the chemical CAS No. 56046-62-9: N-[2-[ethyl(3-methyl-4-nitroso phenyl)amino]ethyl]methanesulfonamide (NEMSET). The following information is in addition to what has already been submitted to you by G. Y. Brokaw, Eastman Kodak Company, Eastman Chemicals Division, in a letter dated July 13, 1982.

As explained below, there is no occupational exposure or environmental release during the manufacture and use of NEMSET. Therefore, we believe that ITC should defer NEMSET from further priority consideration.

1. Physical Properties

- A. Description: Water-wet, green, granular, solid
- B. Melting Point: Approximately 83°C (DTA)
- C. Solubility: Insoluble in water

2. Exposure Estimates

A. Production

NEMSET production in 1983 was 1-2 million pounds. The production forecast for NEMSET is also 1-2 million pounds per year.

B. Process

NEMSET is produced batchwise in an enclosed reactor and isolated as a water-wet, granular filter cake. There is no drumming, drying or storage of NEMSET. After isolation, NEMSET is transferred water-wet immediately into another enclosed reactor for conversion to another chemical. Both the NEMSET and subsequent manufacturing process take place in the same building.

Mr. Martin Greif

C. Use

NEMSET is used as a site-limited chemical intermediate in the production of a photographic developer. NEMSET is totally converted in the subsequent manufacturing process. The final chemical has been tested analytically and found to contain no NEMSET.

D. Occupational Exposure

The only operation with any potential for occupational exposure in the NEMSET production process is when the water-wet NEMSET is removed from its isolation equipment and placed directly into a subsequent reaction vessel. This transfer step is completed by two workers (working together) and takes approximately 10 minutes per batch. Approximately 70 workers are assigned to NEMSET production each year. Total time at this single, potential exposure point for each worker is approximately 6 hours per year.

Workers are required to wear coveralls, safety glasses, head protection, rubber boots and impervious rubber gloves during the entire NEMSET production process. In addition, a vinyl smock is worn when the water-wet cake is transferred. Eastman provides clean clothing to all workers each day. Workers are required to change their clothes and shower after each workday.

We believe these procedures adequately protect workers from any potential exposure. Because the brief transfer of NEMSET is done when it is water-wet and granular with local exhaust, potential exposure through inhalation is essentially zero. The potential for inhalation exposure when using NEMSET is also zero because it is totally converted in a totally closed process. The use of protective clothing minimizes the potential for any dermal exposure throughout the entire NEMSET process.

E. Releases

All waste streams are discharged to an activated sludge, waste water treatment plant. Approximately 10-20 pounds of NEMSET per day is discharged to waste treatment. We expect that the NEMSET discharged to waste treatment is removed and not discharged to the environment.

In concluding, we hope that our description of the controls and procedures used in manufacturing NEMSET will be useful to you in your consideration of this chemical. Because of the protective clothing used and the production system being enclosed except when the water-wet NEMSET is transferred, we conclude that the exposure to workers is nonexistent. Because of NEMSET's use as a

0 0 0 5

--3

Mr. Martin Greif

site-limited, chemical intermediate, the volumes manufactured and the biological treatment of all waste streams, release to the environment is expected to be zero. Because there is no release to the environment and the final chemical that NEMSET is used to produce contains no NEMSET, general population exposure is zero.

We believe this information would support an ITC decision to defer NEMSET from further priority consideration. If we can provide additional assistance to you please contact me at (716) 722-4740 or Mr. Paul Lytle at (716) 722-4748.

Sincerely,

L H Clem

Lee H. Clem
Environmental Technical Services
Health and Environment Laboratories

PEL/LHC:drc

0 0 0 6



CERTIFICATE OF AUTHENTICITY

THIS IS TO CERTIFY that the microimages appearing on this microfiche are accurate and complete reproductions of the records of U.S. Environmental Protection Agency documents as delivered in the regular course of business for microfilming.

Data produced 7 10 97 Marcia Rubalis
(Month) (Day) (Year) Camera Operator

Place Syracuse New York
(City) (State)