

US EPA ARCHIVE DOCUMENT

7-30-90

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No./File Symbol 7969-69
Metam - Sodium - Metam Fluid Manufac

FROM: Sheila A. Moats, Ph.D. SM 1/11/90 Manufacturers Concentrate
Precautionary Review Section E 1/30/90
Registration Support Branch
Registration Division (H75-05C)

TO: Lewis / Stone (PK 21)
Registration Division (H75-05C)

APPLICANT: BASF Corporation
Chemical Division
Parsippany, N.J. 07054

FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt.
<u>Sodium methyl dithiocarbamate</u>	<u>42.0</u>
_____	_____
_____	_____
Inert Ingredient(s):	<u>58.0</u>
Total	100.0%

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Background

BASF Corporation submitted an acute inhalation study to support registration of Metam Fluid Manufacturers Concentrate. In addition to the above ^{mentioned} submission, the registrant had ^{previously} submitted, acute oral, dermal, primary eye & skin irritation studies that were accepted by the Agency.

MAID No: for the acute inhalation study is 414861-01.

Recommendations

1. The acute inhalation study submitted by BASF Corporation is acceptable to RSB/PRS.

2. A dermal sensitization study required for registration was not submitted by BASF Corporation.

3. The registrant must therefore submit a dermal sensitization study to satisfy requirements for registration.

Labeling

1. The "WARNING" signal word is acceptable.

2. The Precautionary Statements must be stated as follows:

"Maybe fatal if swallowed & if

absorbed through the skin. Causes skin irritation. Do not get in eyes or skin or on clothing. Wear protective clothing + rubber gloves. Wash thoroughly with soap + water after handling + before eating, drinking or using tobacco. Remove contaminated clothing + wash before reuse.

3. The Statement of Practical Treatment must be stated as follows

If Swallowed: Call a physician or Poison Central Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on Skin: Wash with plenty of soap + water. Get medical attention.

Note to PM. Upon receipt of an acceptable dermal sensitization study, precautionary labeling may need revising.

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DATA REVIEW FOR ACUTE INHALATION TOXICITY TESTING (S81-3)

Product Manager: (21)
 MRID No.: 414861-01
 Testing Laboratory: BASF Aktiengesellschaft
 Author(s): Klimisch, J.
 Species: Wistar strain - Rats
 Sex: ♂ + ♀ Weight: _____
 Source: _____
 Test Material: Metam Sodium
 Quality Assurance (40 CFR §160.12): Adequate

Reviewer: S. Moats
 Report Date: 7/3/90
 Report No. 86/0346
 Dept of Toxicology, Ludwigshafen
 W. Germany

Summary:

1. LC50 (mg/kg): Males = _____; Females = _____; Combined = > 6.8 mg/L
2. The estimated LC50 is _____
3. Mean Concentration: _____
4. Tox. Category: IV; Classification: Guidelines

Procedure (Deviations From S81-2): 10 ♂ + 10 ♀s were exposed to the test article as a liquid aerosol for 4 hrs. The test article for 4 hrs. The is made up of quartz wool + a fitted glass flask. Sampling apparatus used to determine the description of all samples of a test gp + was calibrated separately. The sampling chamber is equipped with gas meter, impulse counter + automatic pump switch, samples were collected hourly from the breathing zone of the animals. Spectro-photometric method was used for the quantitative determination of the aerosol concentration. Cascade impactor was used for determining particle size.

Exposure Concentration (mg/L)	Reported Mortality (NUMBER KILLED/NUMBER TESTED)		
	Males	Females	Combined
6.8	0/10	0/10	0/20

Symptomology & Gross Necropsy Findings:

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No animals died during the exposure period.
Clinical signs included reddish discharge from the nose + eyes. After exposure nasal + genital area hair were covered with reddish crusts.

Cascade Impactor Stage	Size Range (µm)	Cumulative distribution %
a	2.8	62.6
b	1.2	13.1

MMA D = 2.6 µm (std. dev. = 3.0)