UNITED STATES ENVIRONMENTAL PROTECTION AULICY

PH21 45728-10

MAY 14 5-52

Mr. Paul R. Larson Manager Agricultural Products UCB Chemicals Corporation 5505-A Robin Hood Road Norfolk, VA 23513

Dear Mr. Larson:

Subject: Revise Labeling Metam 42.% Soil Fumigant EPA Reg. No. 45728-10 Your Submission Dated March 11, 1992

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted with the following comments. Five copies of the finished labeling must be submitted prior to releasing the product for shipment.

The product bulletin must be revised to include the same product name as the label. Revise the section under "Application" to conform with direction for us on the label.

Submit five (5) copies of final printed labeling.

If you have any questions please contact Sidney Jackson on (703) 305-7610.

Sincerely yours,

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Susan T. Lewis, Product Manager (21) Fungicide-Herbicide Branch Registration Division (H7505C)

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NET CONTENTS GALLONS

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Metam Manufacturing-Use Concentrate 42%

ACTIVE INGREDIENTS:	BY WT.
Sodium methyidithiocarbamate (Anhydrous)	
INERT INGREDIENTS:	<u>58.0%</u>
,	TOTAL 100.0%

4.2 lbs. Sodium methyldithiocarbamate per gallon.

KEEP OUT OF REACH OF CHILDREN DANGER

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

45728 Corrosive, causes skin damage. Harmful if inhaled, swallowed, or absorbed through the skin, Irritating to eyes, nose, throat, and skin. Avoid breathing vapor or spray mist. Do not get in eyes, on skin, or on clothing. Use proper protective clothing when handling (see "PROTECTIVE CLOTHING AND EQUIPMENT REQUIPEMENTS' section below). In case of contact, immediately remove contaminated clothing and flush with plenty of water. For eyes, flush with water for at least 15 minutes and get medical attention. Wish and dry clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not discharge effluent containing this product directly into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency.

PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS

The following protective clothing and equipment are required to be used by persons engaged in carrying out any operations that are likely to involve direct contact with Metam Manufacturing-Use Concentrate 42% including mixing-loading during formulation operations, equipment calibrations or adjustments, clean up and repair of formulation equipment, sampling, clean up of spills, product transfer, and rinsate disposal, or by any other person engaging in activities likely to result in direct contact with the product. This protective equipment must also be used for any operations that are done within 6 feet of unshielded, pressurized hoses containing Metam Manufacturing-Use Concentrate 42%.

- a. A property <u>FIT TESTED</u> NIOSH- or MSHA-approved half-face respirator with organic vacor cartridges plus non-venting chemical goggles, or a NIOSH- or MSHA-approved full-face respirator with organic vapor cartridges.
- Body covering that has long sleeves and long pants. When a closed system is not used, mixers and loaders must also wear a chemical resistant apron or cloth coveralls.
- c. Chemical resistant gloves and boots.



UCB Chemicals Corporation Norfolk, VA 23513

DIRECTIONS FOR USE

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It is a violation of Federal (U.S.A.) law to use this product in a manner inconsistent with its labeling. For formulating use only. Refer to technical bulletin METAM-42 for formulating information.

Dilute this concentrate with water or a miscible solvent system to the concentration of active ingredient specified on the label of currently registered end-use products containing metam sodium, such as the following types of products:

- Furnigant solutions for the control of weeds, fungi and nematodes in soil of ornamental, food and fiber crops
- P Furnigant solutions for arresting internal decay and controlling insects in wood
- a Anti-microbial agents
- Products to control roots and fungi in sewers

This product may be also repackaged as is only in compliance with EPA-approved labeled uses and rates. Contact UCB Chemicals Corporation for additional information.

Subsequent formulators are responsible for providing documentation to support registration of their product(s).

NOTE: Labeling for products formulated for applications around homes and other structures which people inhabit or otherwise occupy must include appropriate wording for "RESTRICTED USE PESTICIDE" and will include small-area applications such as, non-field applications (including greenhouse) to seed beds, plant beds, lawns and other limited areas.

STORAGE AND DISPOSAL

Keep container tightly sealed during storage. Do not store near feed or food products. Do not store below 0°F. Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Triple rinse (or equivalent) drums or bulk storage tanks. Offer drums for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

UCB Chemicals Corporation makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label.

EPA Reg. No. 45728-10

EPA Est. No. 32557-BL-1

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UCB Chemicals Corporation Norfolk, VA 23513

BULLETI. METAM-42

METAM 42%

(SODIUM METHYLDITHIOCARBAMATE)

This technical Bulletin is directed to formulators and their personnel to provide adequate information on the product. This information should be considered the basis for development and utilization of safe and proper handling procedures. For any further information, contact UCB Chemicals Corporation.

CHEMICAL FORMULA	CAS No.	137-42-8		
CH3-NH-C-S-Na				
S	Molecular Wt. 129.19			
	Empirical Formula C.	HANNaS2		

PHYSICAL AND CHEMICAL PROPERTIES

Active Ingredient

- Physical State

Amber-colored to yellowish-greenish aqueous solution

- <u>Odor</u>

Slight odor like rotten eggs (sulfur)

- Specific Gravity

1.22 at 68 °F (20 °C)

- <u>pH</u>
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- <u>Miscibility</u>

Miscible with water

CHEMICAL REACTIVITY

Concentrated solutions are stable. However, when diluted with water or heated, metam-sodium undergoes decomposition and forms methyl isocyanate and hydrogen sulfide.

Metam is corrosive to copper, zinc and brass. Contact with inorganic acids liberates carbon disuifide.

FLAMMABILITY AND FIREFIGHTING

This product is considered non-combustible. However, under fire conditions, it may decompose and emit toxic fumes of nitrogen and sulfur oxides.

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Use standard extinguishing media — water, carbon dioxide, dry chemicals or foam. When there is a potential for exposure, wear a self-contained breathing apparatus in positive pressure mode. In addition, impervious clothing should be worn.

TOXICOLOGY

Toxicity to animals: LD_{30} (mg/kg)

oral-rat	896
oral-mouse	50
oral-guinea pig	815
oral-rabbit	320
skin-rabbit	800
skin-rat	> 2000

Toxicity to humans:

Irritating to eyes, mucous membranes and skin. May cause severe skin irritation or be corrosive to skin. May cause skin sensitization reactions in certain individuals. Harmful by ingestion.

Symptoms of intoxication:

1. by ingestion:

gastro-enteritis with possibility of shock and renal lesions. Moreover, other troubles may appear: somnolence, cardiac and respiratory disorders. Accompanied by alcohol intake, Metam-sodium may cause violent vomiting and shock.

- 2. In case of contact with eyes: lachrymation, blepharospasm, conjunctivitis.
- 3. In case of contact with skin: dermatitis

SAFETY MEASURES. FIRST AID

- Use a properly <u>FIT TESTED</u> NIOSH- or MSHA- approved half-face respirator with organic vapor cartridges plus non-venting chemical goggles, or a NIOSH- or MSHA- approved full-face respirator with organic vapor cartridges.
- Wear impervious clothing, gloves, and footwear.
- In case of ingestion, provide gastric lavage and seek medical advice.
- In case of contact with eyes, rinse immediately with plenty of water and soap.
- Wash face and hands thoroughly after handling. Do not drink alcohol.

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PACKAGING

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- Stainless steel road tankers.

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- Stainless steel rail cars.
- 55 gallon polyethylene drums.

STORAGE

Avoid excessive heat and cold. Keep containers tightly closed. Product will crystallize at temperatures below freezing. Crystals formed can be redissolved by slight heating. Do not apply steam or other source of heat directly to container.

SPILL OR LEAK PROCEDURES

Dike spill. Absorb with inert materials and collect for disposal. Flush area with water. Take necessary actions to prevent washings from entering waterways. For further information, contact UCB Chemicals Corporation.

APPLICATIONS

For formulating of agricultural fumigants, with nematicidal, fungicidal, insecticidal, and herbicidal activity.

Generally used as a general purpose pre-plant soil fumigant to control pests of turf, ornamentals, food and fiber crops, and seed or plant beds.

IMPORTANT

Failure to properly register with the U.S. Environmental Protection Agency any product formulated with this pesticide is a violation of the Federal Insecticide Act.

UCB Chemicals Corporation 5565-A Robin Hood Road Norfolk, VA 23513 (204)057-0610

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