



VERICHEM

MATERIAL SAFETY DATA SHEET

N-948-WB

DATE: 09/25/2007

CAS NO: 6317-18-6

SUPERSEDES: 08/18/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: N948 WB
SYNONYMS: Methylene bis thiocyanate 10%
CHEMICAL FAMILY:
MOLECULAR FORMULA: C₃S₂N₂
MOLECULAR WEIGHT: 128

VERICHEM, INC 3499 Grand Avenue, Pittsburgh, PA 15225 (412-331-7299, 8:30 am to 5:00 pm).

EMERGENCY PHONE: For any emergency involving spill, leak, fire, exposure, or accident call CHEMTREC: 1-800-424-9300. Outside the USA and Canada call: 703-527-3887.

2. COMPOSITION/INFORMATION ON INGREDIENTS

REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
Methylene bis thiocyanate	6317-18-6	~ 10	Non established	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: Causes skin burns and irreversible eye damage. May be fatal if swallowed. Harmful if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

APPEARANCE AND ODOR: A moderately viscous, uniform, opaque liquid dispersion, tan to light yellow in color with a characteristic odor.

EFFECTS OF OVEREXPOSURE:

EYE EXPOSURE: This product may cause irreversible eye damage upon contact depending on the length of exposure, solution concentration and first aid measures.

SKIN EXPOSURE: This product would be considered a moderate skin irritant. Percutaneous toxicity may be appreciable according to references on aliphatic thiocyanates in general, but this product is not expected to be absorbed in harmful amounts unless exposure is widespread and prolonged. In a study carries out on over 50 human volunteers, this product was found not to be a sensitizer at a dose of up to 1%.

INHALATION: The dust of crystalline methylene bis(thiocyanate) is considered to be highly toxic by inhalation. This product is an aqueous dispersion of methylene bis(thiocyanate), however, and is unlikely to pose an inhalation hazard unless mists are generated.

INGESTION: The product would be regarded as toxic if swallowed. Ingestion of the product may produce irritation of the gastrointestinal tract, nausea, vomiting, cramps, and diarrhea. In severe cases, cyanosis (blush skin due to deficient oxygenation of the blood) and depression of the central nervous system may result.

4. FIRST AID MEASURES (IN CASE OF CONTACT)

EYE: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical aid immediately.

SKIN: In case of contact, flush skin with plenty of water. Remove contaminated clothing. Seek medical aid if irritation persists. Wash clothing before reuse.

INGESTION: If swallowed, call physician or Poison Control Center. Do not induce vomiting or give anything by mouth to an unconscious person.

INHALATION: If inhaled, removed to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical aid.

5. **FIRE FIGHTING MEASURES**

FLAMMABLE PROPERTIES

This product is not by definition a “flammable liquid” or a “combustible liquid”.

FLASH POINT:>200°F

FLAMMABLE LIMITS (% BY VOLUME):.....N/A

AUTOIGNITION TEMPERATURE:.....N/A

DECOMPOSITION TEMPERATURE:

EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION

EXTINGUISHING MEDIA: Use extinguishing media appropriate for the surrounding fire.

FIRE-FIGHTING INSTRUCTIONS: Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential.

FIRE & EXPLOSION HAZARDS: This product emits toxic gases under fire conditions.

DECOMPOSITION PRODUCTS: Methylene bis thiocyanate will decompose slowly above 212°F and rapidly above 401°F, producing gases of carbon dioxide, sulfur dioxide, and nitrogen oxides.

NFPA RATINGS: Health = 3 Flammability = 1 Reactivity = 0 Special Hazard = None
Hazard rating scale: 0=minimal 1=slight 2=moderate 3= serious 4=severe

6. **ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wearing appropriate personal protective equipment, contain spill, collect onto inert absorbent and place into suitable container.

7. **HANDLING AND STORAGE**

HANDLING

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Improper handling of this product can be injurious to workers.

- Do not get in eyes, on skin or clothing.
- Avoid breathing mist.
- Use with adequate ventilation.
- Wash thoroughly after handling. Keep container closed when not in use.
- If frozen, thaw in a warm area. Do not use steam or hot water to thaw. Inspect and mix as required to maintain uniformity.

STORAGE: Store above 40°F and below 100°F for maximum shelf life and product stability.

8. **PERSONAL PROTECTION**

EYE PROTECTION REQUIREMENTS: Chemical splash goggles and face shield.

SKIN PROTECTION REQUIREMENTS: Chemical resistant gloves and protective clothing.

VENTILATION REQUIREMENTS: Local and general exhaust ventilation to control levels of exposure.

RESPIRATOR REQUIREMENTS: When misting may occur in the work area, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).

9. **PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR:A moderately viscous, uniform, opaque liquid dispersion, yellow to light yellow in color with a characteristic odor.

BOILING POINT:100°C

MELTING POINT:N/A

VAPOR PRESSURE:Similar to water

SPECIFIC GRAVITY:1.0 – 1.1 @ 25°C

VAPOR DENSITY(air = 1): Similar to water

PERCENT VOLATILE (BY WEIGHT):~84 (water)

pH:.....3.0 –5.0 @ 25°C

SATURATION IN AIR (PERCENT BY VOLUME):.....N/A

EVAPORATION RATE:N/A

SOLUBILITY IN WATER:Dispersible

10. STABILITY AND REACTIVITY

STABILITY (CONDITIONS TO AVOID): At temperature above the melting point of Methylene Bis thiocyanate (107°C), is very unstable. At 212°F (100°C) the half life is three months, whereas at 302°F (150°C) IT IS ABOUT 35 MINUTES. The heat of decomposition (-209 cal/gram) is more than sufficient for thermal runaway. At 338-374°F (170-190°C) decomposition would be almost instantaneous, toxic and odiferous gases such as carbon disulfide, methyl mercaptan and carbonyl sulfide.

POLYMERIZATION (CONDITIONS TO AVOID): INCOMPATIBLE MATERIALS: Strong oxidizers and bases

HAZARDOUS DECOMPOSITION PRODUCTS: Methylene Bis thiocyanate will decompose slowly above 212°F and rapidly above 401°F, producing gases of carbon dioxide, sulfur dioxide, and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

ON PRODUCT:

Product Oral LD₅₀ (rat): 640 mg/kg

Product Dermal LD₅₀ (rabbit):>2.2 g/kg

Product Inhalation LC₅₀ (rat):< 0.09 mg/l for MTC

Eye irritation:The Primary was found to be corrosive.

Skin Irritation:The primary Irritation Index is 3.75. The test article initially produced moderate irritation which subsided to mild irritation by 72 hours and very slight irritation by day 14.

12. ECOLOGICAL INFORMATION

FISH AND WILDLIFE

ENVIRONMENTAL DATA: This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing the product to sewer system without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

AQUATIC: 96 hr LC₅₀ (rainbow trout): 1.9 ppm
 96 hr LC₅₀ (bluegill sunfish): 2.08 ppm
 96 hr LC₅₀ (Daphnia magna): 0.48 ppm

13. DISPOSAL CONSIDERATION

ENVIRONMENTAL DATA: Discarded product, as sold, would not be considered a RCRA Hazardous Waste.

DISPOSAL METHOD: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

	DOT Shipping Information	IMO Shipping Information	ICAO/IATA	TRANSPORT CANADA
Shipping Name	N/A	N/A	N/A	N/A
Hazard Class	Not restricted	Not restricted	Not restricted	Not restricted
Packing Group	N/A	N/A	N/A	N/A
Subsidiary Class	N/A	N/A	N/A	N/A
UN/ID Number	N/A	N/A	N/A	N/A
Transport Label Required	N/A	N/A	N/A	N/A
Packing Instructions Passenger Cargo	N/A	N/A	N/A	N/A
Max. Net Quantity Passenger Cargo	N/A	N/A	N/A	N/A
D.O.T. Hazardous Substances	N/A	N/A	N/A	N/A
IMDG Page	N/A	N/A	N/A	N/A

15. **REGULATORY INFORMATION**

INVENTORY INFORMATION

US TSCA: Pesticides are exempted by TSCA (the Toxic Substances Control Act), under Section 3(2)(a)ii, from the provisions of the Act.

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA

ACUTE:(Y)
CHRONIC:(Y)
FIRE:(N)
REACTIVE:(N)
PRESSURE:(N)

16. **OTHER INFORMATION**

NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

HEALTH:3
FIRE:.....1
REACTIVITY:0

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