



**MATERIAL SAFETY
DATA SHEET**

N-521P

DATE: 08/18/2008

CAS NO: 533-74-4
SUPERSEDES: 08/11/2008

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: N-521P
SYNONYMS: Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione (DAZOMET)
CHEMICAL FAMILY: Thione
MOLECULAR FORMULA: C₅H₁₀N₂S₂
MOLECULAR WEIGHT: 162.27

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 COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	533-74-4	98% Min.	None Established	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR: White crystalline solid with a slight sulfide-type odor.

EFFECTS OF ACUTE EXPOSURE: Irritating to eyes, skin, and respiratory tract. Avoid inhalation of dust. **Weak sensitizer.** The material may cause an allergic skin reaction in a small proportion of sensitive individuals. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.

4. FIRST AID MEASURES (IN CASE OF CONTACT)

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.

Have the product container or label with you when calling a poison control center or doctor.

5. FIRE FIGHTING MEASURES

FIRE HAZARD:

FLAMMABLE LIMITS: Not defined as flammable or combustible. This product is not compatible with moisture and when in contact with water will decompose into toxic vaporous materials such as methyl isothiocyanate. It is not sensitive to static discharge.

IN CASE OF FIRE: Exercise caution when fighting fires involving chemical substances. Respiratory protection is required. Burning will produce toxic fumes. Use water fog, alcohol foam, carbon dioxide, or dry chemicals. Cool hot containers with cool water. Vapors and products of combustion are irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours or longer depending upon the extent of exposure.

6. **ACCIDENTAL RELEASE MEASURES**

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices.

The recommendations described in this section are provided as general guidance for minimizing exposure when handling this product. Because use conditions will vary depending upon customer applications, specific safe handling procedures should be developed by a person knowledgeable of the intended use conditions and equipment. During the development of safe handling procedures, consideration should be given to the need for cleaning of equipment and piping systems to render them non hazardous before maintenance and repair activities are performed.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Use adequate ventilation and wear a dust mask to prevent inhalation exposure. Wear protective clothing to prevent skin and eye contact. Use the following procedures: Sweep up spilt material being careful not to create dust. Recover as much of the pure product as possible into appropriate containers. Otherwise, place sweepings in a chemical waste container for disposal. Generously cover contaminated area with a slurry of common, powdered household laundry detergent and water. Using a stiff brush, work the slurry into cracks and crevices. Allow to stand for 2-3 minutes then flush with water. Repeat if necessary. Dike water for later disposal. Do not allow contaminated water to enter waterways.

7. **HANDLING AND STORAGE**

HANDLING:

Avoid getting in eyes or on skin. Avoid breathing dusts. Provide ventilation to control dust. Wash thoroughly after handling.

STORAGE:

Store in a cool, dry place. Keep container tightly closed

8. **PERSONAL PROTECTION**

EYE PROTECTION REQUIREMENTS:

Chemical safety glasses or face shield.

SKIN PROTECTION REQUIREMENTS:

Chemical resistant gloves, long sleeve shirts and pants, socks and shoes.

VENTILATION REQUIREMENTS:

Local and general exhaust ventilation to control levels of exposure.

RESPIRATOR REQUIREMENTS:

If dusting occurs, use a NIOSH approved respirator.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR:

white crystalline solid with a slight sulfur compound smell

BOILING POINT:

N/A

MELTING POINT:

102.2 °C to 105.5°C

VAPOR PRESSURE:

N/A

BULK DENSITY:

33.6 lb./cu. ft.

VAPOR DENSITY:

N/A

PERCENT VOLATILE (BY WEIGHT):

<1%

pH:

N/A

SATURATION IN AIR (PERCENT BY VOLUME):

UNK

EVAPORATION RATE:

N/A

SOLUBILITY IN WATER:

0.2 g/100g in water

10. **STABILITY AND REACTIVITY**

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Oxides (CO, CO₂) & Sulfur Oxides (SO₂, SO₃)

STABILITY:

Stable under normal conditions of use and storage. Keep dry. However, may slowly decompose at temperatures greater than 60°C to produce hydrogen sulfide, carbon disulfide and methylamine.

COMPATIBILITY:

NOT compatible with moisture

11. **TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS

Acute oral LD₅₀:

363 mg/kg – Rat

Acute Dermal LD₅₀:

>2000 mg/kg – rabbit

Acute Inhalation LC₅₀:

1.7 mg/l (4 hrs) - rat.

**12. ECOLOGICAL INFORMATION
FISH AND WILDLIFE**

AQUATIC: This material is toxic to fish. Do not contaminate water sources by cleaning equipment or disposing of wastes.

LC50 = 16.2 mg/l 96 hours Rainbow Trout
LC50 = 11.2 mg/l 48 hours Daphnia Magna

13. DISPOSAL CONSIDERATION

Material that cannot be used as directed on the product label or chemically reprocessed and empty containers must be disposed of according to any applicable regulations. NOTE: State and local regulations may be more stringent than federal.

14. TRANSPORT INFORMATION

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

DOT Shipping Information	ICAO/IATA	TRANSPORT CANADA
Not Regulated	Not Regulated	Not Regulated
Non-Hazardous	Non-Hazardous	Non-Hazardous

IMO Shipping Information	
Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., ((Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione)
Hazard Class	9
Packing Group	III
UN/ID Number	UN3077
Transport Label Required	Marine Pollutant
IMDG	(EMS# F-A, S-F, ERG Guide 171, HazMat Code 4960133).

15. REGULATORY INFORMATION

SARA 302 (Extremely Hazardous Substances List) No components of this product are listed.

SARA 312 (Hazard Category) Immediate (Acute) Health Hazard.

SARA 313 (Toxic Chemicals List) This product contains the following toxic chemical(s) subject to the reporting requirements of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372.
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)-No components of this product are listed.

RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste-No components of this product are listed.

CWA (Clean Water Act) Listed Substances-No components of this product are listed.

FDA (Food and Drug Administration)-This product is approved under the following FDA 21 CFR sections:

- 175.105
- 176.230
- 176.300
- 178.3120

TSCA (Toxic Substances Control Act) Applicability-All components are listed on the TSCA Inventory. FIFRA Registered pesticides are exempt from the requirements of TSCA.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)-This product is a registered pesticide 67869-19

16. OTHER INFORMATION

NFPA HAZARD RATING (NATIONAL FIRE PROTECTION ASSOCIATION)

FIRE: 1 HEALTH: 3 REACTIVITY: 1

HMIS (HAZARDOUS MATERIALS IDENTIFICATION SYSTEM)

FIRE: 1 HEALTH: 3 REACTIVITY: 1 PPE: C

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