

Novartis Crop Protection, Inc
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call

Novartis : 1-800-888-8372
CHEMTREC : 1-800-424-9300

1. CHEMICAL IDENTIFICATION

Product Name: **CITATION INSECTICIDE** Product No.: A-6808 B
EPA Signal Word: Caution
Active Ingredient(%): Cyromazine (75%) CAS No.: 66215-27-8
Chemical Name: N-cyclopropyl-1,3,5-triazine-2,4,6-triamine
Chemical Class: Substituted Melamine (Triazine) Insecticide

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Kaolin Clay	15 mg/m ³ (Total Dust);5 mg/m ³ (Respirable)	2 mg/m ³ (Respirable)	Not Established	No
Amorphous Silica	80 mg/m ³ /%SiO ₂	10 mg/m ³	Not Established	IARC, 3
Surfactant	Not Established	Not Established	15 mg/m ³ (Total Dust)*	No
Sodium Sulfite	Not Established	Not Established	Not Established	IARC, 3
Cyromazine (75%)	Not Established	Not Established	Not Established	No

* recommended by manufacturer

3. HAZARDS IDENTIFICATIONNotes to Physician

There is no specific antidote if this product is ingested.

If a large amount has been ingested and emesis is inadequate, lavage stomach.

Treat symptomatically.

An aqueous suspension of activated charcoal can be administered to absorb remaining toxicant.

Symptoms of Acute Exposure

Exposure may cause irritation of eyes, skin or upper respiratory tract.

Hazardous Decomposition Products

None Known

Physical Properties

Appearance: Gray-Tan Powder

Odor: Sweet, Musty Odor

Unusual Fire, Explosion and Reactivity Hazards

This material presents a slight dust explosion hazard.

4. FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

Ingestion: If victim is fully conscious, give a large quantity of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.

Eye Contact: Immediately rinse eyes with a large amount of running water. Hold eye lids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

Skin Contact: Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

Inhalation: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

Notes to Physician

There is no specific antidote if this product is ingested.

If a large amount has been ingested and emesis is inadequate, lavage stomach.

Treat symptomatically.

An aqueous suspension of activated charcoal can be administered to absorb remaining toxicant.

Medical Condition Likely to be Aggravated by Exposure

Individuals with pre-existing respiratory disorders should use extra care in handling this product.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method): Not Applicable

Flammable Limits (% in Air): Lower: %; Upper: % Not Applicable

Autoignition Temperature: Not Available

Flammability: Not Flammable

Unusual Fire, Explosion and Reactivity Hazards

This material presents a slight dust explosion hazard.

In Case of Fire

Use dry chemical, foam, or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and use a particulate filter, NIOSH approved per 42 CFR Part 84. Select N or R or P type as appropriate for the oil characteristics of any other air contaminants present. Filter efficiency may range from 95 - 99.97% as appropriate for the size distribution of dusts present. For small spills, sweep up, keeping dust to a minimum, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for

exposure to the material. Always wash thoroughly after handling.

- Eye Contact: To avoid eye contact, wear safety glasses with side shields or chemical goggles.
- Skin Contact: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.
- Inhalation: To avoid breathing dust, use a particulate filter, NIOSH approved per 42 CFR Part 84. Select N or R or P type as appropriate for the oil characteristics of any other air contaminants present. Filter efficiency may range from 95 - 99.97% as appropriate for the size distribution of dusts present.

Applicators/Handlers: Please refer to the product label for personal protective clothing/equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Gray-Tan Powder
- Odor: Sweet, Musty Odor
- Melting Point: 224-225°C (Technical)
- Boiling Point: Not Applicable
- Specific Gravity/Density: 20.17 lbs./cu.ft.
- pH: 8-10(1% suspension in water)

Solubility in H₂O

Cyromazine : 8.0 g/L @ 25°C

Vapor Pressure

Cyromazine : 1.80E-04 mPa @ 20°C

10. STABILITY AND REACTIVITY

Reactivity

- Stability: Stable
- Hazardous Polymerization: Will Not Occur
- Conditions to Avoid: None Known

Hazardous Decomposition Products

None Known

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

- Ingestion: slightly toxic
Oral LD50 (Rat) : 4,460 mg/kg body weight
- Dermal: slightly toxic
Dermal LD50 (Rabbit) : > 2,010 mg/kg body weight
- Inhalation: slightly toxic
Inhalation LC50 (Rat) : > 2.5 mg/l air - 4 hours
- Eye Contact: mildly irritating (Rabbit)
- Skin Contact: moderately irritating (Rabbit)
- Skin Sensitization: Not a sensitizer (Guinea Pig)

Mutagenic Potential

Cyromazine: None observed

Reproductive Hazard Potential

Cyromazine: None observed

Chronic/Subchronic Toxicity Studies

Cyromazine: None observed

Carcinogenic Potential

Cyromazine: None observed

Other Toxicity Informatio

Not Available

Toxicity of Other Components

Amorphous Silica

Amorphous Silica is listed as an IARC (Group 3) carcinogen not classifiable as human carcinogen (No Data Available) with limited animal evidence. Prolonged exposure to Amorphous Silica may cause damage to respiratory system and irritation to skin and eyes.

Kaolin Clay

Long term overexposure to high concentrations of this dust without the use of a respirator may produce x-ray evidence of dust in the lungs and may affect respiratory function.

Surfactant

Exposure can result in eye, skin and respiratory tract irritation.

Target Organs

Active Ingredients

Cyromazine : None Known

Inert Ingredients

Amorphous Silica : Respiratory Tract, Skin and Eyes

Kaolin Clay : Respiratory Tract

Surfactant : Eyes, Skin and Respiratory Tract

12. ECOLOGICAL INFORMATION

Summary of Effects

Cyromazine:

Slightly toxic to birds and fish, and moderately toxic to aquatic invertebrates.

Eco-Acute Toxicity

Cyromazine: Rainbow Trout 96-hour LC50 51 mg/l
Bluegill Sunfish 96-hour LC50 90 mg/l
Daphnia magna 48-hour LC50 9.1 mg/l
Bobwhite Oral LD50 1,785 mg/kg
Mallard Oral LD50 >2,510 mg/kg
Bobwhite 8-day Dietary LC50 >5,620 ppm
Mallard 8-day Dietary LC50 >5,620 ppm

Eco-Chronic Toxicity

Cyromazine: Fish (Fathead minnow) Early Life Stage MATC 22 mg/l
Invertebrate (Daphnia Magna) Life Cycle MATC 0.45 mg/l

Environmental Fate

Cyromazine:

Not Available

13. DISPOSAL CONSIDERATION

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification:

Not Applicable; No Label or Placard Required

B/L Freight Classification

Insecticides or Fungicides; Agricultural, N.O.S.

International Transportation

Not Applicable

15. REGULATORY INFORMATION

SARA Title III Classification

Section 311/312: Acute Health Hazard
Chronic Health Hazard

Section 313 chemical(s): Not Applicabl

Proposition 65

Not Applicable

CERCLA Reportable Quantity (RQ)

None

RCRA Classification

Not Applicable

TSCA Status

Exempt from TSCA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1
Flammability: 0
Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

Questions concerning the safe handling of the product should be referred to:

Industrial Health
1-800-334-9481

Issued Date: 4/7/88
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Supersedes: 5/27/98

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

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