

**Syngenta Crop Protection, Inc.**  
**Post Office Box 18300**  
**Greensboro, NC 27419**

**In Case of Emergency, Call**  
**1-800-888-8372**

**1. PRODUCT IDENTIFICATION**

Product Name: **CITATION INSECTICIDE** Product No.: A6808B  
 EPA Signal Word: Caution  
 Active Ingredient(%): Cyromazine (75.0%) CAS No.: 66215-27-8  
 Chemical Name: N-cyclopropyl-1,3,5-triazine-2,4,6-triamine  
 Chemical Class: Substituted Melamine (Triazine) Insecticide  
 EPA Registration Number(s): 100-667 **Section(s) Revised: 2**

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

| Material                         | OSHA PEL   | ACGIH TLV                                   | Other  | NTP/IARC/OSHA Carcinogen |
|----------------------------------|--|---|--|--------------------------|
| Crystalline Silica, Quartz       | 10 mg/m <sup>3</sup> /(%SiO <sub>2</sub> +2) (respirable dust)         | 0.025 mg/m <sup>3</sup> (respirable silica) | 0.05 mg/m <sup>3</sup> (respirable dust)**                               | IARC 1; ACGIH A2         |
| Amorphous Silica                 | 80 mg/m <sup>3</sup> /%SiO <sub>2</sub> TWA (total dust)               | 10 mg/m <sup>3</sup> TWA (inhalable dust)   | Not Established  | IARC Group 3             |
| Kaolin Clay                      | 15 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup> TWA (respirable) | 2 mg/m <sup>3</sup> TWA (respirable)        | 10 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup> TWA (respirable)** | No                       |
| Sodium Alkylnaphthalenesulfonate | Not Established  | Not Established                             | 15 mg/m <sup>3</sup> TWA (total dust)*                                   | No                       |
| Cyromazine (75.0%)               | Not Established  | Not Established                             | 3 mg/m <sup>3</sup> TWA ***  | No                       |

\* recommended by manufacturer

\*\* recommended by NIOSH

\*\*\* Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.  
 Syngenta Hazard Category: B, S

**3. HAZARDS IDENTIFICATION**
Symptoms of Acute Exposure

Causes eye, skin and respiratory tract irritation.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Gray-tan powder

Odor: Sweet, musty

Unusual Fire, Explosion and Reactivity Hazards

This product is a combustible powder and like all combustible powders can ignite, burn and form explosive mixtures with air if not handled correctly. Mixtures of powder in air with flammable solvent vapors should be avoided.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

#### 4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

- Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

##### Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

##### Medical Condition Likely to be Aggravated by Exposure

None known.

#### 5. FIRE FIGHTING MEASURES

##### Fire and Explosion

- Flash Point (Test Method): Not Applicable
- Flammable Limits (% in Air): Lower: % Not Applicable Upper: % Not Applicable
- Autoignition Temperature: Not Available
- Flammability: Not Flammable

##### Unusual Fire, Explosion and Reactivity Hazards

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During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

##### In Case of Fire

Use dry chemical, foam or CO<sub>2</sub> 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. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

#### 6. ACCIDENTAL RELEASE MEASURES

##### In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Sweep up material and place in a compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

#### 7. HANDLING AND STORAGE

This product is a combustible powder and like all combustible powders can ignite, burn and form explosive mixtures with air if not handled correctly. Mixtures of powder in air with flammable solvent vapors should be avoided.

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, or P or HE filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Gray-tan powder

Odor: Sweet, musty

Melting Point: 435°F (Technical)

Boiling Point: Not Applicable

Specific Gravity/Density: 20.17 lbs./cu.ft.

pH: 8 - 10 (1% suspension in water)

### Solubility in H<sub>2</sub>O

Cyromazine: 8 g/l @ 77°F (25°C)

### Vapor Pressure

Cyromazine: 1.3 x 10<sup>(-9)</sup> mmHg @ 68°F (20°C)

## 10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: See "Fire, Explosion and Reactivity Hazards", Sec. 5.

Materials to Avoid: None known.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

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: Practically Non-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)

### Reproductive/Developmental Effects

Cyromazine: None observed.

#### Chronic/Subchronic Toxicity Studies

Cyromazine: None observed.

#### Carcinogenicity

Cyromazine: None observed.

#### Other Toxicity Information

None.

#### Toxicity of Other Components

##### Amorphous Silica

Amorphous Silica is listed as an IARC (Group 3) carcinogen not classifiable as a 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.

##### Crystalline Silica, Quartz

Chronic inhalation exposure to crystalline silica is known to cause silicosis and pulmonary fibrosis in humans. Experimental animals exposed to crystalline silica developed respiratory tract cancers.

##### Kaolin Clay

The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. This is expected to be a low hazard for usual industrial handling. Long term exposure to high concentrations of this dust may produce x-ray evidence of dust in the lungs. Continued long term overexposure may affect respiratory function in some individuals.

##### Sodium Alkyl-naphthalenesulfonate

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

#### Target Organs

##### Active Ingredients

Cyromazine: None known

##### Inert Ingredients

Amorphous Silica: Respiratory tract, skin, eye

Crystalline Silica, Quartz: Respiratory tract

Kaolin Clay: Eye, skin, lung, digestive tract

Sodium Eye, skin, respiratory tract

Alkyl-naphthalenesulfonate:

## **12. ECOLOGICAL INFORMATION**

#### Summary of Effects

Cyromazine:

Slightly toxic to fish and invertebrates. Practically non-toxic to birds and bees.

#### Eco-Acute Toxicity

Cyromazine: Bees LC50/EC50 > 25 ug/bee  
Invertebrates (Water Flea) LC50/EC50 > 92.8 ppm  
Fish (Trout) LC50/EC50 > 87.9 ppm  
Fish (Bluegill) LC50/EC50 > 89.7 ppm  
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,620 ppm  
Birds (8-day dietary - Mallard Duck) LC50/EC50 > 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:

The information presented here is for the active ingredient, cyromazine.

Low bioaccumulation potential. Not persistent in soil. Stable in water. Low to moderate mobility in soil. Sinks in water (after 24 h).

### 13. DISPOSAL CONSIDERATIONS

#### 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

Ground Transport - NAFTA

Not regulated.

Do not ship by air.

#### B/L Freight Classification

Insecticides, NOIBN, O/T Poison

#### Comments

None.

### 15. REGULATORY INFORMATION

#### EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: Not Applicable

#### California Proposition 65

Not Applicable

#### CERCLA/SARA 302 Reportable Quantity (RQ)

None

#### RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

#### TSCA Status

Exempt from TSCA, subject to FIFRA

### 16. OTHER INFORMATION

#### NFPA Hazard Ratings

Health: 2  
Flammability: 1  
Instability: 0

#### HMIS Hazard Ratings

Health: 1  
Flammability: 1  
Reactivity: 0

|   |          |
|---|----------|
| 0 | Minimal  |
| 1 | Slight   |
| 2 | Moderate |
| 3 | Serious  |
| 4 | Extreme  |

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 04/07/1988

Revision Date: 06/15/2006

Replaces: 01/13/2006

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.

RSVP# : Not Applicable

End of MSDS