

## 1. Identification

**Product identifier** FLYNEXX™ GRANULES 2% Cyromozine

**Other means of identification**

**Synonyms** Flynexx Granules Product ID Number 10000

**Recommended use** Insecticide

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company Name** Piedmont Animal Health

**Address** 204 Muirs Chapel Road, Suite 200  
Greensboro, NC 27410

**Telephone** 1-336-544-0320

**SDS E-mail** rpetzold@piedmontpharma.com

**SDS telephone** 1-336-544-0320

**Emergency Telephone Numbers** CHEMTREC 24 hours per day and 365 days per year  
Human or Animal Exposure Reporting: 1-800-424-9300  
Transportation Emergency Telephone: CHEMTREC 1-800-424-9300  
(Outside U.S. 1-703-527-3887)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Combustible dust

**Label elements**

**Hazard symbol** None.

**Signal word** Caution

**Hazard statement** May form combustible dust concentrations in air.

**Precautionary statement**

**Prevention** Not available.

**Response** Not available.

**Storage** Store in cool dry place, avoid direct sunlight and temperatures exceeding 95 degrees F (35 degrees C).

**Disposal** Pesticide disposal-unused material at approved disposal site.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Urea		57-13-6	Trade secret
Cyromazine		66215-27-8	2
Other components below reportable levels			97

## 4. First-aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	This product is not flammable.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.  Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.  Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.
<b>Environmental precautions</b>	

## 7. Handling and storage

<b>Precautions for safe handling</b>	Do not taste or swallow. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep at temperature not exceeding 35 °C. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Protect from freezing and direct sunlight.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Urea (CAS 57-13-6)	TWA	10 mg/m <sup>3</sup>	Total particulate.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** Cyromazine: 0.14 mg/m<sup>3</sup> 8 hour TWA

<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Safety glasses with side shields recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Granular.
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	White to beige.
<b>Odor</b>	Slight Urea.
<b>Odor threshold</b>	Not available.
<b>pH</b>	7.5 - 9.5 (1% aqueous solution)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	0.6 - 0.8 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive
<b>Oxidizing properties</b>	No oxidizing properties.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.

<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
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#### FLYNEXX™ GRANULES

##### Acute

##### **Dermal**

LD50 Rat > 5000 mg/kg

##### **Inhalation**

LC50 Rat > 2 mg/l, 4 hours

##### **Oral**

LD50 Rat > 5000 mg/kg

Components	Species	Test Results
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Cyromazine (CAS 66215-27-8)

##### Acute

##### **Dermal**

LD50 Rat > 3100 mg/kg

##### **Inhalation**

LC50 Rat > 2720 mg/m<sup>3</sup>, 4 Hours 50% powdered formulation

##### **Oral**

LD50 Rabbit 1467 mg/kg

Rat 3387 mg/kg

Urea (CAS 57-13-6)

##### Acute

##### **Dermal**

LD50 Rabbit > 21 g/kg

##### **Inhalation**

LC Rat > 770 mg/m<sup>3</sup>, 4 hours (mortality)

##### **Oral**

LD50 Rat 8471 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

##### **Corrosivity**

Cyromazine

Result: Slight irritant  
Species: Rabbit

##### **Irritation Corrosion - Skin**

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Result: No skin irritation.  
Species: Rabbit

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

##### **Eye**

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Result: Mild eye irritation.  
Species: Rabbit

##### **Eye Contact**

Cyromazine

Result: Slight irritant  
Species: Rabbit

## Respiratory or skin sensitization

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** This product is not expected to cause skin sensitization.

### Sensitization

Cyromazine

Result: Not a contact sensitizer  
Species: Guinea pig

### Skin sensitization

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Result: Not a skin sensitizer.  
Species: Guinea pig

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

### Mutagenicity

Cyromazine

Result: No evidence of mutagenic effects

**Carcinogenicity** Animal testing did not show any carcinogenic effects. (Cyromazine)  
Based on available data, the classification criteria are not met.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Not available.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Cyromazine (CAS 66215-27-8)	LD50	Mallard Duck ( <i>Anas platyrhynchos</i> )	2510 mg/kg
		Quail (Japanese Quail)	> 6000 mg/kg, 7 days
	Other	Bobwhite quail ( <i>Colinus virginianus</i> )	1785 mg/kg
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	LC50	Daphnia magna	> 97.8 mg/l, 48 hours
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	> 89.7 ppm, 96 hours
		Channel catfish ( <i>Ictalurus punctatus</i> )	> 91.6 mg/l, 96 hours
		Rainbow Trout	> 87.9 ppm, 96 hours
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.31 - 0.64 mg/l, 21 days
<b>Terrestrial</b>			
Other	LC50	Earthworm ( <i>Eisenia foetida</i> )	> 1000 mg/kg, 14 days
Urea (CAS 57-13-6)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )	> 10000 mg/l, 24 hours
Fish	LC50	Mozambique tilapia ( <i>Tilapia mossambica</i> )	22500 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

**Partition coefficient n-octanol / water (log Kow)**

Cyromazine	0.96
Urea	-2.11

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

### 14. Transport information

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
One or more components are not listed on TSCA.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

## US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

## US. Rhode Island RTK

Not regulated.

## US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 09-20-2016

**Revision date** 06-01-2017

**Version #** 02

**Lab Code** Health: 1  
Fire: 1  
Reactivity: 0

### List of abbreviations

TWA: Time Weighted Average

### Disclaimer

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact:  
Piedmont Animal Health  
1-336-544-0320

### Revision Information

Product and Company Identification: Synonyms  
Hazard(s) identification: Response  
Composition / Information on Ingredients: Disclosure Overrides  
Exposure controls/personal protection: Other  
Toxicological Information: Toxicological Property Data  
Toxicological information: Mutagenicity  
Toxicological information: Reproductivity  
Toxicological information: Respiratory sensitization  
Ecological information: Ecotoxicity  
GHS: Classification