1. IDENTIFICATION

Product identifier

Trade name: Pradia™

EPA Registration No.: 71512-33-59807

Chemical Name: Cyclaniliprole; 3-bromo-N-[2-bromo-4-chloro-6-[(1-cyclopropylethyl) amino] carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide and Flonicamid; N-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide

Chemical Family: Anthranilic diamide; pyrazolylphenyl and pyridine mixture

Recommended use: Agricultural industry: Insecticide

Details of the supplier of the safety data sheet

Company information: OHP, Inc.
PO Box 746
Bluffton, SC 29910-0746

Phone Number: (800) 659-6745

Emergency telephone numbers

TRANSPORTATION EMERGENCY (24 hours a day) call: Chemtrec: 1-800-424-9300

MEDICAL EMERGENCY (24 hours a day) and Product Information call: 1-800-356-4647

Product Information and SDS Information call: 1-800-356-4647 or see ohp.com

2. HAZARDS IDENTIFICATION*

Hazard Classification:

Flammable liquid (Category 4)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 2)

Signal Word: WARNING

Hazard Symbols:

Hazard Statements: Combustible liquid. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary Statements: Keep away from flames and hot surfaces. No smoking. Wear protective gloves and eye or face protection. In case of fire, use water spray, fog or foam to extinguish. Store in a well-ventilated place. Keep cool. Avoid release to the environment. Collect spillage. Dispose of contents and container in accordance with the product label.

* According to OSHA criteria. For FIFRA criteria, see section 15

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #:</th>
<th>% by Weight</th>
<th>TLV/PEL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclaniliprole</td>
<td>1031756-98-5</td>
<td>4.46</td>
<td>Not established</td>
</tr>
<tr>
<td>Flonicamid</td>
<td>158062-67-0</td>
<td>5.96</td>
<td>Not established</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.

Skin Contact: 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.

Eye Contact: 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.

Inhalation: 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 treatment advice.

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

5. FIRE-FIGHTING MEASURES

Extinguishing Media

SMALL FIRE: Use water spray, dry chemicals, foam or carbon dioxide.

LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

Unusual Fire and Explosion

Hazards: May decompose under fire conditions emitting gases and vapors such as hydrogen bromide, nitrous vapors, chlorine vapors, carbon monoxide and carbon dioxide which may be
toxic and irritating to the respiratory tract.

**Fire Fighting Instructions**
- Wear full firefighting turnout gear and self-contained breathing apparatus.

6. **ACCIDENTAL RELEASE MEASURES**

**Precautionary Measures**
- Use protective equipment and engineering controls identified in section 8 of this document.

**Containment and Clean-Up**
- Contain spill. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Wash spillage area with water. Do not allow wash water to enter drains or surface waters.

7. **HANDLING AND STORAGE**

**Precautions**
- Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Storage**
- Store in original container, in a secured, dry and cool place separate from fertilizer, food, and feed. Avoid cross-contamination with other pesticides.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Reactivity**
- No evidence of reactivity.

**Stability**
- This product remains stable at 20°C over 24 months.

**Possibility of Hazardous Reactions**
- None known.

**Conditions to Avoid**
- Extremes of temperature.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

**Physical Appearance**
- Brown liquid

**Odor**
- Chemical odor

**pH**
- 4 – 5

**Boiling Point**
- Not available

**Melting Point**
- Not available

**Freezing Point**
- Not applicable

**Flash Point**
- 80.5°C (177°F)

**Evaporation Rate**
- Not available

**Flammability**
- Combustible

**Flammable Limits**
- Not available

**Vapor Pressure**
- Not available

**Vapor Density**
- Not available

**Density**
- 1.12 g/mL @ 20°C

**Solubility**
- Not available

**N-Octanol/Water**
- Not available

**Auto-Ignition Temperature**
- Not available

**Decomposition Temperature**
- Not available

**Volatility**
- Not available

10. **STABILITY AND REACTIVITY**

**Reactivity**
- No evidence of reactivity.

**Stability**
- This product remains stable at 20°C over 24 months.

**Possibility of Hazardous Reactions**
- None known.

**Conditions to Avoid**
- Extremes of temperature.
### 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:**
- Acute oral toxicity (LD₅₀): >2000 mg/kg [Rat].
- Acute dermal toxicity (LD₅₀): >2000 mg/kg [Rat].
- Acute inhalation toxicity (LC₅₀): >6.03 mg/L [actual airborne concentration]; >12.4 mg/L [nominal] 4 hour(s) [Rat].

**Skin Irritation:** Non-irritating. Primary dermal irritation index = 0.0 [Rabbit]

**Eye Irritation:** Minimally irritating. Slight redness and chemosis were observed immediately after installation to test animals. Significant discharge was also observed. All effects reversed within 24 hours without irrigation. [Rabbit]

**Sensitization:** Not a contact sensitizer.

**Mutagenicity:** No evidence of mutagenicity.

**Carcinogenicity:** No adverse effects were seen in mice ingesting cyclaniliprole in a 78-week feeding study. Dietary exposure to rats over two years showed thyroid effect in males ingesting over 6000 ppm but no carcinogenic effects in males or females at up to 20,000 ppm. Tests with flonicamid provided insufficient evidence of carcinogenic potential to humans.

**Reproductive Toxicity:** Animal studies show no significant evidence of reproductive toxicity at doses of cyclaniliprole or flonicamid up to 20,000 ppm.

**Target Organ Effects:** 90-day feeding studies with cyclaniliprole showed increased liver, heart and ovary weights in female rats exposed to extreme doses of 20,000 ppm but such effects were not observed in a follow-up 1-year feeding study. Increased liver weights were observed in dogs fed over 1000 ppm but did not meet GHS guidelines for hazard classification. No effects were observed in studies with flonicamid.

**Aspiration:** No data available.

### 12. ECOLOGICAL INFORMATION

**Summary of Effects:**
Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with local or regional permits.

**Ecotoxicity Data:**
- Fish (Rainbow Trout) 96-hour LC₅₀ = 361 mg/L [16.6 mg a.i./L]
- Invertebrate (Daphnia magna) 48-hour EC₅₀ = 2.36 mg/L [0.0679 mg a.i./L]
- Algae (Pseudokirchneriella subcapitata) 96-hour E₅₀ > 1000 mg/L [> 48.3 mg a.i./L]
- Mysid shrimp (Americamysis bahia) 96-hour LC₅₀ > 0.2 mg a.i./L
- Oyster (Crassostrea virginica) EC₅₀ = 23 μg a.i./L
- Bobwhite Quail Acute LD₅₀ > 2000 mg/kg body weight (practically non-toxic)
- Mallard Duck Acute LD₅₀ = 1591 mg/kg (females), 2621 mg/kg (males)
- Sub-Acute Dietary Bird LD₅₀ > 5000 ppm in diet for both Quail and Mallard

**Persistence / Degradability:** Cyclaniliprole degrades very slowly in soil under both aerobic and anaerobic conditions (aerobic DT₅₀ 445 – 1118 days; anaerobic DT₅₀ 561 days). It does not show hydrolytic degradation at pH of 4 – 9 but degrades rapidly under photolytic conditions (DT₅₀ 1.2 – 2.7 days). DT₅₀ values in aquatic sediment water ranged from 32.9 – 44.9 days, but dissipation from the total system was very slow with corresponding DT₅₀ values of 507 – 866 days.

Flonicamid has moderate persistence in water and in the total water-sediment system, with DT₅₀ of 30-37 and 36-44 days respectively. Flonicamid exhibits very low to low persistence in various soils (DT₅₀ in range of 0.7 – 1.8 days).

**Bioaccumulative Potential:** Not expected to be bioaccumulative. Maximum experimentally derived BCF = 103.

**Mobility in Soil:** Cyclaniliprole exhibits low to medium mobility in soil (Kₐoc = 247 – 1380 mL/g; Kₒar arithmetic mean = 790 mL/g). Flonicamid exhibits high to very high mobility in soil (Kₒar = 2.5 – 8.7 mL/g; Kₒar arithmetic mean = 5.9 mL/g).
13. DISPOSAL CONSIDERATIONS
Waste Disposal: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, 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.

Container Disposal: DO NOT reuse or refill this container. Triple rinse container according to label directions. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Non-bulk (Ground Transport)</th>
<th>Bulk (Ground Transport)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Not regulated</td>
<td>Environmentally Hazardous Substance, Liquid, N.O.S. (Cyclaniliprole)</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>Not regulated</td>
<td>Class 9</td>
</tr>
<tr>
<td>Identification Number:</td>
<td>Not regulated</td>
<td>UN 3082</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>Not regulated</td>
<td>PG III</td>
</tr>
</tbody>
</table>

Hazardous Substances
Reportable Quantity: Not applicable.

Special Provisions for Transport: Class 9 placard not required for non-bulk packaging transported by highway or rail within the U.S. [49CFR 172.504(f)(9)].

<table>
<thead>
<tr>
<th></th>
<th>IATA (Air Transport)</th>
<th>IMDG (Ocean Transport)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Environmentally Hazardous Substance, Liquid, N.O.S. (Cyclaniliprole)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CYCLANILIPROLE)</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>Class 9</td>
<td>CLASS 9</td>
</tr>
<tr>
<td>Identification Number:</td>
<td>UN 3082</td>
<td>UN 3082</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>PG III</td>
<td>PG III</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION
U.S. Federal and State Regulations:

SARA 313 Inventory
Ingredients: Not Listed

SARA 312 Hazards
Classification: Not Listed

Listed as carcinogen by
IARC: Not Listed
NTP: Not Listed
OSHA: Not Listed
CA Prop 65: Not Listed
TSCA: Exempt from TSCA, subject to FIFRA.

FIFRA: This chemical is a pesticide product pending registration by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law (FIFRA). FIFRA requirements differ from the OSHA classification criteria and hazard information required for safety data sheets in Section 2 above, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required by FIFRA on the pesticide label:

CAUTION
Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. This product is highly toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT contaminate waters when disposing of equipment washwater or rinsate. DO NOT apply when weather conditions favor drift from the treated areas. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Canada (WHMIS): Exempt
16. OTHER INFORMATION

NFPA Hazard Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>0 Minimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>2 Moderate</td>
</tr>
<tr>
<td>Instability</td>
<td>0</td>
</tr>
</tbody>
</table>

Notice to Reader

All information contained in this Safety Data Sheet is furnished free of charge and is intended for your evaluation. In our opinion, the information as of the date of the Safety Data Sheet is reliable; however, it is your responsibility to determine the suitability of the information for your use. You are advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exist or because of applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information gathered by you; and you must make independent determinations of the suitability and completeness of the information from all sources to assure both proper use of the material described herein and the safety and health of employees. Accordingly, no guarantee expressed or implied is made by OHP, Inc. as to the results to be obtained based upon your use of the information, nor does OHP, Inc. assume any liability arising out of your use of the information.

Revision Date: January 28, 2019

Conforms to UN Globally Harmonized System and OSHA Hazard Communication Standard 29 CFR 1910.1200(g)