SAFETY DATA SHEET
EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

1. IDENTIFICATION

PRODUCT NAME: Harvanta® 50SL Insecticide
DESCRIPTION: A liquid insecticide.
EPA Reg. No.: registration pending

COMPANY IDENTIFICATION:
Summit Agro USA, LLC
240 Leigh Farm Road, Suite 215
Durham, NC 27707

2. HAZARD IDENTIFICATION

WARNING
Combustible liquid

Very toxic to aquatic life with long lasting effects

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclaniliprole</td>
<td>3-bromo-N-[2-bromo-4-chloro-6-[(1-cyclopropylethyl)amino]carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)1H-pyrazole-5-carboxamide (CA)</td>
<td>1031756-98-5</td>
<td>4.55%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

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

IF SWALLOWED: 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.

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.

5. FIREFIGHTING MEASURES

Flash Point: 83.5°C
Flammable Limits (LFL-UFL): Not available
Fire and Explosion Hazards: May decompose under fire conditions emitting gasses and vapors which may be toxic and irritating to the respiratory tract.

Means of Extinction: SMALL FIRE: water spray, dry chemical, foam, or CO₂, LARGE FIRE: water spray, fog, or foam. DO NOT use water jet.
Fire Fighting Instructions: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to runoff.

Firefighting Equipment: Self-contained breathing apparatus with full firefighting turn-out gear.

Hazardous Combustion Products: hydrogen bromide, nitrous vapors, chlorine vapors, carbon monoxide and carbon dioxide

NFPA Ratings: Health – 1 / Flammability – 2 / Reactivity – 0
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 trains or surface waters.

7. HANDLING AND STORAGE

**Handling:** 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 secure, dry and cool place separate from other pesticides, fertilizer, food, and feed. Avoid cross-contamination with other pesticides.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Ensure that eyewash stations and safety showers are near work areas.

**Protective Clothing:** Long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of any waterproof material. Where eye contact is possible, use protective eyewear (such as chemical splash goggles or a face shield)

**General:** Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Always follow the label instructions when handling and using this product. A respirator is not normally required when handling sealed containers. Use effective engineering controls to comply with facility occupational exposure limits. In case of emergency spills, use a NIOSH-approved respirator with an organic vapor (OV) filter and any N, R, P, or HE pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Transparent yellow liquid

**Flash Point:** 83.5°C

**pH:** 3-6

**Boiling Point:** Not available

**Density:** 1.08 – 1.12 g/mL @ 20°C

**Solubility:** 0.15 mg/L in water @ 20°C

10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Extreme temperatures.

**CHEMICAL STABILITY:** This product remains stable at 20°C over 24 months.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen bromide, nitrous vapors, chlorine vapors, carbon monoxide and carbon dioxide.

**INCOMPATIBILITY WITH OTHER MATERIALS:** Strong oxidizing agents, strong acids or bases

**POLYMERIZATION:** Will not occur.
11. TOXICOLOGICAL INFORMATION

**ACUTE ORAL TOXICITY:** Oral LD$_{50}$ (rat): >2,000 mg/kg

**ACUTE DERMAL TOXICITY:** Dermal LD$_{50}$ (rat): > 2,000 mg/kg

**ACUTE INHALATION TOXICITY:** Inhalation LC$_{50}$ (rat): > 5.05 mg/L [actual airborne concentration]; > 19.0 mg/L (nominal) 4 hour(s)

**EYE IRRITANT:** Very slightly irritating. Slight redness and chemosis were observed immediately after installation to test animals. Significant discharge was also observed. All effects reversed within 48 hours without irrigation. [Rabbit]

**SKIN IRRITATION:** Non-irritating (primary dermal irritation index = 0.0)

**SENSITIZATION:** Not a contact sensitizer

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** None known.

**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.

ACGIH: Not listed

IARC: Not listed

NTP: Not listed

OSHA: Not listed

**MUTAGENIC DATA:** No evidence of mutagenic effects during in vivo and in vitro assays.

**ADDITIONAL DATA:**

Animal studies show no significant evidence of reproductive toxicity at doses of cyclaniliprole up to 20,000 ppm. 90-day feeding studies 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.

12. ECOLOGICAL INFORMATION

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.

Cyclaniliprole degrades very slowly in soil under both aerobic and anaerobic conditions (aerobic DT$_{50}$ 445 – 1118 days; anaerobic DT$_{50}$ 561 days). It does not show hydrolytic degradation at pH of 4 – 9 but degrades rapidly under photolytic conditions (DT$_{50}$ 1.2 – 2.7 days). DT$_{50}$ values in aquatic sediment water ranged from 32.9 – 44.9 days, but dissipation from the total system was very slow with corresponding DT$_{50}$ values of 507 – 866 days.

The following is for the active ingredient, Cyclaniliprole:

**AQUATIC TOXICITY**

Rainbow Trout 96-hr LC$_{50}$ = 16.6 mg/L

Daphnia magna 48-hr EC$_{50}$ = 0.0679 mg/L

Algae (Pseudokirchneriella subcapitata) 96-hr ErC$_{50}$ > 48.3 mg/L

Mysid shrimp 96-hr LC$_{50}$ > 0.2 mg a.i./L

Oyster EC$_{50}$ = 23 µg a.i./L

**OTHER TOXICITY**

Bobwhite Quail Acute LD$_{50}$ > 2000 mg/kg

Mallard Duck Acute LD$_{50}$ > 2000 mg/kg

Sub-Acute Dietary Bird LD$_{50}$ > 5000 ppm in diet for both Quail and Mallard
13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

PESTICIDE 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

US DOT:
Containers < 119 Gallons (450 Liters) shipped by land:
Not regulated by DOT.

Containers ≥ 119 Gallons (450 Liters) or if shipped by air (IATA) or vessel (IMDG):

DOT Shipping Name: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Cyclaniliprole), PG III, Class 9
DOT Emergency Response Guide: 171
Marine Pollutant: Yes

IMDG (shipments by vessel):
UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Cyclaniliprole), PG III, Class 9, Marine Pollutant

IATA (shipments by air):
UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Cyclaniliprole), PG III, Class 9

15. REGULATORY INFORMATION

FIFRA –
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION:
Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. 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.
See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal Instructions.

ENVIRONMENTAL HAZARDS
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 this product while bees or other pollinating insects are foraging the treatment area. 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.
15. REGULATORY INFORMATION (CONT.)

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

SARA Title III – Section 302 Extremely Hazardous Substances
Not Listed

SARA Title III – Section 311/312 Hazard Categories
Immediate

SARA Title III – Section 313 Reportable Ingredients
Not Listed

CERCLA –
Not Listed

CALIFORNIA PROP 65 STATUS –
This product does not contain any chemicals known to the state of California to cause cancer or reproductive harm.

CANADA –
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

REFER TO THE PRODUCT LABEL FOR TERMS AND CONDITIONS OF USE

Warranty Disclaimer
To the extent consistent with applicable law, all such risks shall be assumed by the buyer. Summit Agro USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. SUMMIT AGRO USA LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SUMMIT AGRO USA LLC AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

SUMMIT AGRO USA LLC and the SELLER offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of SUMMIT AGRO USA LLC.

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SDS Version: 1.0 Effective Date: 07/12/2017