1. IDENTIFICATION

Product name: ALIAS® 240 SC Systemic Insecticide (PCP28475)
Chemical name of active ingredient(s): Imidacloprid: 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine
Manufacturer/Registrant: ADAMA Agricultural Solutions Canada Ltd.

For fire, spill, and/or leak emergencies, contact Infotrac:
Phone: 1-800-535-5053
For medical emergencies and health and safety inquiries, contact Prosar:
Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>CAS NO.</th>
<th>%</th>
<th>OSHA PEL</th>
<th>ACIGH TLV</th>
<th>NTP/IARC/OSHA (Carcinogen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>21.87</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
</tr>
</tbody>
</table>

NE=None established
NA=Not applicable

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES:
Appearance: Off-white viscous liquid suspension
Odor: Mild

EMERGENCY OVERVIEW: CAUTION. KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing.

LIKELY ROUTES OF EXPOSURE: Inhalation; skin contact; skin absorption.

SYMPTOMS OF ACUTE EXPOSURE: This material may cause eye irritation. Eye injury may persist for several days. Harmful if absorbed through skin. This material does not cause skin irritation and is not a sensitizer. Harmful if swallowed or inhaled.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No specific medical conditions are known which may be aggravated by exposure to this product.

HAZARDOUS DECOMPOSITION PRODUCTS: May give off poisonous fumes including hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NOx).

4. FIRST AID MEASURES

FIRST AID:

IF SWALLOWED: call a poison control centre 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 centre or doctor. Do not give anything by mouth 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 centre or doctor for treatment advice.

IF INHALED, 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 centre or doctor for further treatment advice.

IF IN EYES, 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 centre or doctor for treatment advice.
Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** No specific antidote is available. Treat the patient symptomatically.

### 5. FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FLASHPOINT:</strong></td>
<td>&gt;93°C (&gt;200° F)</td>
</tr>
<tr>
<td><strong>FLAMMABLE LIMITS (% in air):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>AUTOIGNITION TEMPERATURE:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>EXTINGUISHING MEDIA:</strong></td>
<td>Use water spray, alcohol-resistant foam, carbon dioxide (CO₂), dry chemical.</td>
</tr>
</tbody>
</table>

**FIRE-FIGHTING PROCEDURES**

Keep out of smoke. Cool containers/tanks with water spray. Fight fire from upwind position. Do not allow run-off from fire fighting to enter drains or watercourses. Equipment or materials involved in pesticide fires may become contaminated. Wear self-contained breathing apparatus and protective suit.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May give off poisonous fumes including hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NOx).

### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO TAKE FOR SPILLS:** Dike area to prevent runoff. Recover material, if possible. Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust). Scrape up and place in appropriate closed container (see Section 7:Handling and Storage). Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Collect and contain contaminated absorbent and dike material for disposal. Do not allow spilt product to enter soil or water.

**ADDITIONAL INFORMATION:** Isolate area and keep unauthorized people away. Avoid breathing vapors and avoid skin contact. Use proper protective equipment to minimize personal exposure (see Section 8). Contaminated soil may have to be removed and disposed.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL INFOTRAC AT (800) 535-5053.**

### 7. HANDLING AND STORAGE

**HANDLING:** Read label carefully before use. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment (PPE) after handling this product.

**STORAGE:** Store in cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area.

**STORAGE TEMPERATURE (MIN/MAX):**

- Minimum: Normal ambient storage temperatures.
- Maximum: 30 day average not to exceed 100° F.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATION AND ON-FARM APPLICATIONS, CONSULT THE PRODUCT LABEL.**

**ENGINEERING CONTROLS:** Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

**EYE PROTECTION:** Use splash-proof goggles.
HAND PROTECTION: Wear chemical resistant gloves made of waterproof material such as polyethylene or polyvinyl chloride.

BODY PROTECTION: Wear long-sleeved shirt, long pants and shoes plus socks.

RESPIRATOR PROTECTION: No personal respiratory protective equipment is normally required. When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

ADDITIONAL PROTECTIVE MEASURES: Follow all label instructions. Eye wash facility and safety shower should be available. Remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash hands thoroughly before eating, drinking, chewing gum, using tobacco or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white viscous liquid suspension
ODOR: Mild
pH: 7.5
SPECIFIC GRAVITY: 1.12 @ 20° C
SOLUBILITY IN WATER: Dispersible
VISCOSITY: 350-500 mPa.s @ 25° C

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal warehouse conditions.
CONDITIONS TO AVOID: None known.
MATERIALS TO AVOID: None known.
HAZARDOUS REACTIONS: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: May give off poisonous fumes including hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO2), carbon monoxide (CO), nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES
Acute Oral LD50 (Rat): >4,870 mg/kg (male); 4,143 mg/kg (female)
Acute Dermal LD50 (Rabbit): >2,000 mg/kg (male and female)
Acute Inhalation LC50 (Rat): >5.33 mg/L air (4-hours; male and female); >20 mg/l (1-hour; male and female; extrapolated from the 4-hr LC50)

Eye Irritation (Rabbit): Mild eye irritation
Dermal Irritation (Rabbit): No skin irritation.
Dermal Sensitization (Guinea pig): Not a skin sensitizer.

SUBCHRONIC TOXICITY:
In a 3-week dermal toxicity study, rabbits treated with imidacloprid showed no local or systemic effects at levels up to and including 1,000 mg/kg, the limit dose. In a 4-week inhalation study, rats exposed to high concentrations of imidacloprid exhibited decreased body weight gains and changes in clinical chemistries and organ weights.

CHRONIC TOXICITY:
In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroids and/or liver.

CARCINOGENICITY:
In oncogenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.

REPRODUCTIVE TOXICITY:
In a two-generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with maternal toxicity.

DEVELOPMENTAL TOXICITY:
In developmental toxicity studies in rats and rabbits, there was no evidence of an embryonic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.

NEUROTOXICITY:
In acute and subchronic neurotoxicity screening studies in rats, imidacloprid produced slight neurobehavioral effects in each study at the highest dose tested. There were no correlating morphological changes observed in the neural tissues. In a one-generation developmental neurotoxicity screening study in rats, offspring exposed to imidacloprid showed decreased motor activities. These effects occurred at the highest dose tested and in conjunction with maternal toxicity. There were no correlating morphological changes observed in the neural tissues.

MUTAGENICITY:
The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Keep out of lakes, streams, ponds or other aquatic systems. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
This product is highly toxic to aquatic invertebrates.
This product is toxic to birds. Dispose of all excess and any spilled treated seed pieces by covering or incorporating into the soil. Left over treated seed should be double sown around the headland, or buried away from water sources such as lakes, streams, ponds or other aquatic systems. Apply this product only in accordance with this label.

13. DISPOSAL CONSIDERATIONS
Do not contaminate water, food, or feed by storage or disposal.
PRODUCT DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency.
CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:
Not regulated
INTERNATIONAL TRANSPORTATION:
IMO (vessel): Not regulated
IATA (air): Not regulated

15. REGULATORY INFORMATION

CANADIAN REGULATIONS:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the CPR.
WHMIS INGREDIENT DISCLOSURE LISTED COMPONENTS : None
SARA TITLE III CLASSIFICATION:
Section 302: Not applicable
Section 311/312: Acute health hazard (immediate)
Section 313: Not applicable
CA PROPOSITION 65: Not applicable
CERCLA RQ: Not applicable
RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.
TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA HAZARD RATINGS</th>
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<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH:</td>
<td>MINIMAL</td>
<td>SLIGHT</td>
<td>MODERATE</td>
</tr>
<tr>
<td>FLAMMABILITY:</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>REACTIVITY:</td>
<td>1</td>
<td>3</td>
<td>SEVERE</td>
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</tbody>
</table>


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