1 Identification

Product Name: 4FARMERS IMIDACLOPRID 600 FLOWABLE SEED DRESSING INSECTICIDE

Recommended Use of the Chemical and Restriction on Use:
Agricultural insecticide (flowable seed dressing insecticide)

Details of Manufacturer or Importer:
4Farmers Australia Pty Ltd
70 McDowell Street
Welshpool WA 6106

Phone Number: +61 8 9356 3446

Emergency telephone number: National Poison Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria. Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply. Then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG/IMSBC respectively. See details below and in Section 14 of this SDS.

Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Signal Word Warning

Hazard Statements
H302 Harmful if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements
P273 Avoid release to the environment.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.
4 First Aid Measures

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:
In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:
If swallowed, do not induce vomiting. Rinse mouth with water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Information for Doctor:
No specific antidotes are known for neonicotinoid intoxications. It is important to support respiration if signs of paralysis appear and to monitor blood pressure and pulse rate, since bradycardia and hypotonia are possible. Since the compounds do not inhibit cholinesterase activity, treatment with a reactivating oxime is not indicated. Symptoms of poisoning may be mediated by either stimulation or inhibition of nicotinic activity, or by other possible mechanisms. Therefore treatment with a nicotinic antagonist might be either ineffective or contraindicated. Treat symptomatically.

Symptoms Caused by Exposure:
Ingestion: Swallowing large quantities may cause vomiting, diarrhoea, abdominal pain, lethargy, depressed muscular tone, muscular cramps, respiratory disturbances and trembling.

5 Fire Fighting Measures

Suitable Extinguishing Media: Foam, dry chemical powder or carbon dioxide.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of carbon and nitrogen, hydrogen chloride and phosgene. Product is not flammable, but may burn if heated. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear Safe Work Australia approved respiratory protection and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.
Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.
Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:
Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from prolonged periods in direct sunlight, heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents.

8 Exposure controls and personal protection

Exposure Standards:

<table>
<thead>
<tr>
<th>Substance</th>
<th>NES TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5 1,2,3-Propanetriol</td>
<td>10</td>
</tr>
</tbody>
</table>

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:
Use a Safe Work Australia approved vapour respirator with filter type a-p under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:
PVC, PVA, nitrile, neoprene, rubber or vinyl gloves, cotton overalls buttoned to the neck and wrist and a washable hat. See Australian/New Zealand Standard AS/NZS 2161 and 4501 for more information.

Eye and Face Protection:
Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:
Form: Liquid suspension
Colour: Dark pink to red
Odour: No information available
Odour Threshold: No information available

pH-Value:
9-10

Melting point/freezing point:
-10 °C

Initial Boiling Point/Boiling Range:
> 100 °C

Flash Point:
> 93.4 °C

Flammability:
Product is not flammable.

Auto-ignition Temperature:
No information available
**Decomposition Temperature:** No information available

**Explosion Limits:**
- **Lower:** No information available
- **Upper:** No information available

**Vapour Pressure:** No information available

**Relative Density:** 1.23 (water = 1)

**Vapour Density:** No information available

**Evaporation Rate:** No information available

**Solubility in Water:** Miscible

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Heat, sparks, open flames, hot surfaces and direct sunlight.

**Incompatible Materials:** Oxidising agents.

**Hazardous Decomposition Products:** Combustion products include oxides of carbon and nitrogen, hydrogen chloride and phosgene.

### 11 Toxicological Information

**Toxicity:**

<table>
<thead>
<tr>
<th>LD₅₀/LC₅₀ Values Relevant for Classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>56-81-5 1,2,3-Propanetriol</strong></td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>138261-41-3 Imidacloprid (ISO)</strong></td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dermal</td>
</tr>
<tr>
<td>Inhalation</td>
</tr>
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<td></td>
</tr>
</tbody>
</table>

**Acute Health Effects**

**Inhalation:** May cause respiratory irritation. The inhalation of vapours or aerosols (mists, fumes) generated by the material during the course of normal handling, may be damaging to the health of the individual.

**Skin:** Open cuts, abraded or irritated skin should not be exposed to this material as entry to the blood stream may occur and produce systemic injury. The material may cause mild but significant inflammation of the skin either following direct contact or after a delay.

**Eye:** May cause eye irritation.

**Ingestion:** Harmful if swallowed. Swallowing large quantities may cause vomiting, diarrhoea, abdominal pain, lethargy, depressed muscular tone, muscular cramps, respiratory disturbances and trembling. Animal experiments indicate that ingestion of less than 150 grams may be fatal or may produce serious damage to health.
Safety Data Sheet
according to WHS Regulations

Printing date 23.05.2017
Revision: 23.05.2017

Product Name: 4FARMERS IMIDACLOPRID 600 FLOWABLE SEED DRESSING INSECTICIDE

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.
Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.
Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.
Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.
Carcinogenicity: This product does NOT contain any IARC listed chemicals.
Reproductive Toxicity: Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.
Aspiration Hazard: Based on classification principles, the classification criteria are not met.
Chronic Health Effects:
May cause sensitisation by inhalation in some individuals. Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva.
Repeated skin exposure can cause contact dermatitis which is characterised by redness, swelling and blistersing.
Substance accumulation in the body is likely following repeated or long term exposure.
Existing Conditions Aggravated by Exposure: May aggravate any pre-existing dermatitis condition.

Additional toxicological information:
The Australian Acceptable Daily Intake (ADI) for imidacloprid for a human is 0.06 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 6 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2017).

12 Ecological Information

Ecotoxicity: Harmful to bees by direct contact.
Aquatic toxicity: Very toxic to aquatic life with long lasting effects.
Persistence and Degradability:
The persistence of imidacloprid is high in water/soil. The persistence of glycerol is low in water/soil.
Bioaccumulative Potential: The bioaccumulation of imidacloprid and glycerol is low.
Mobility in Soil: The mobility of imidacloprid is medium. The mobility of glycerol is high.

13 Disposal considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.
Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 Transport information

UN Number
ADG
Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail in packaging, including IBCs not greater than 3000 L each - SP No. AU01.
Product Name: 4FARMERS IMIDACLOPRID 600 FLOWABLE SEED DRESSING INSECTICIDE

IMDG, IATA

Proper Shipping Name
IMDG
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT
IATA
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Dangerous Goods Class
IMDG Class:
9 Miscellaneous dangerous substances and articles.

Packing Group:
IMDG, IATA
III

Marine pollutant: Yes

### 15 Regulatory information

<table>
<thead>
<tr>
<th>Australian Inventory of Chemical Substances:</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5 1,2,3-Propanetriol</td>
</tr>
<tr>
<td>138261-41-3 Imidacloprid (ISO)</td>
</tr>
</tbody>
</table>

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 6

### 16 Other information

Date of Preparation or Last Revision: 23.05.2017

Abbreviations and acronyms:
ADG: Australian Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC₅₀: Lethal concentration, 50 percent
LD₅₀: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 4: Acute toxicity – Category 4
Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Data compared to the previous version altered:
Section 2 - Hazard(s) Identification, heading "Hazardous Nature".
Section 5 - Fire Fighting Measures, heading "Specific Hazards Arising from the Chemical".
Section 9 - Physical and Chemical Properties, heading "Flammability".
Section 11 - Toxicological Information, heading "Additional toxicological information".

Disclaimer
This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”.
The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. 4Farmers Australia Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.