

## SAFETY DATA SHEET

According to  
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

### Section 1. Identification of the material and the supplier

|                          |  |
|--------------------------|--|
| Product:                 | <b>Imperio</b>   |
| Product Use:             | Insecticide  |
| Restriction of Use:      | Refer to Section 15  |
| <br>                     |  |
| New Zealand Supplier:    | <b>Adria Crop Protection Solutions</b>                                     |
| Address:                 | 407 State Highway 16<br>Kumeu 0841,<br>Auckland                            |
| <br>                     |  |
| Telephone:               | +64 9 412 9817   |
| Fax:                     | +64 9 412 9807   |
| Website:                 | www.adria.nz   |
| <br>                     |  |
| <b>Emergency No:</b>     | <b>0800 734 607 (24hr)</b><br><b>0800 764 766 (National Poison Centre)</b> |
| <br>                     |  |
| Date of SDS Preparation: | 29 October 2018  |

### Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

**EPA Approval No: HSR100664**

#### Pictograms



Toxic /Allergic Chronic    Ecotoxic

Signal Word: **DANGER**

| HSNO Classification | Hazard Code | Hazard Statement  | GHS Category      |
|---------------------|-------------|---|-------------------|
| 6.1D (oral)         | H302        | Harmful if swallowed.   | Acute Tox. 4      |
| 6.3B                | H316        | Causes mild skin irritation.  | Skin Irrit. 3     |
| 6.5B                | H317        | May cause an allergic skin reaction.                                    | Skin Sens. 1      |
| 6.9A                | H372        | Causes damage to organs through single, prolonged or repeated exposure. | STOT RE 1         |
| 9.1A                | H410        | Very toxic to aquatic life with long lasting effects.                   | Aquatic Chronic 1 |
| 9.3B                | H432        | Toxic to terrestrial vertebrates.                                       | -                 |
| 9.4A                | H441        | Very toxic to terrestrial invertebrates.                                | -                 |

| Prevention Code | Prevention Statement   |
|-----------------|--|
| P102            | Keep out of reach of children.   |
| P103            | Read label before use.   |
| P260            | Do not breathe fumes, vapours or spray.                                |
| P264            | Wash hands thoroughly after handling.                                  |
| P270            | Do not eat, drink or smoke when using this product.                    |
| P272            | Contaminated work clothing should not be allowed out of the workplace. |
| P273            | Avoid release to the environment.                                      |
| P280            | Wear protective clothing as detailed in Section 8.                     |

| Response code | Response Statement   |
|---------------|--|
| P101          | If medical advice is needed, have product container or label at hand.      |
| P314          | Get medical advice/attention if you feel unwell.                           |
| P330          | Rinse mouth.   |
| P363          | Wash contaminated clothing before reuse.                                   |
| P391          | Collect spillage.  |
| P301 + P312   | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P302 + P352   | IF ON SKIN: Wash with plenty of soap and water.                            |
| P333 + P313   | If skin irritation or rash occurs: Get medical advice/attention.           |

| Storage Code | Storage Statement |
|--------------|-------------------|
| P405         | Store locked up.  |

| Disposal Code | Disposal Statement   |
|---------------|----------------------|
| P501          | Refer to Section 13. |

### Section 3. Composition / Information on Hazardous Ingredients

| Ingredients                                      | Content (%w/v) | CAS NUMBER. |
|--|----------------|-------------|
| Indoxacarb                                       | 22.5           | 173584-44-6 |
| Other ingredients determined not to be hazardous | To bal         |             |

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

If on Skin After contact with skin, wash immediately with soap and water. If skin irritation or rash occurs: Get medical advice/attention.

If Swallowed If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766) or a doctor immediately.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Call a POISON CENTRE or a doctor immediately.

#### Most important symptoms and effects, both acute and delayed

Symptoms:

**Ingestion:** Harmful if swallowed.

**Inhalation:** Not applicable.

**Skin:** Causes mild skin irritation. May cause an allergic skin reaction.

**Eye:** Not applicable.

**Chronic:** Causes damage to organs through single or repeated or prolonged exposure.  
**Treatment:** Treatment: No known specific antidote. Treat symptomatically (decontamination, vital functions).

## Section 5. Fire Fighting Measures

|   |  |
|---|--|
| <b>Hazard Type</b>  | This product is non-flammable.                   |
| <b>Hazards from products</b>  | Carbon and nitrogen oxides.                      |
| <b>Suitable Extinguishing media</b>                                       | Dry chemical, water spray, foam, carbon dioxide. |
| <b>Recommended protective clothing &amp; Precautions for firefighters</b> | Wear SCBA and chemical-protective clothing.      |
| <b>HAZCHEM CODE</b>   | <b>3Z</b>  |

## Section 6. Accidental Release Measures

### Personal precautions:

Use protective clothing. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately.

### Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Notify authorities if product enters sewers or public waters.

### Spill and Disposal procedures:

Absorb spills with inert material and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely, according to local Council regulations.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Ventilation is required.
- Keep away from heat sources and direct sunlight.
- Refer to Section 15 for restrictions of use.
- Wear protective clothing as detailed in Section 8.

### Precautions for Storage:

- Keep away from children.
- Keep away from heat and protect from sunlight.
- Protect against freezing.
- Stores containing more than 100L are subject to requirement of an emergency management response plan, secondary containment and signage.
- Store away from incompatible materials listed in Section 10.

**Section 8****Exposure Controls / Personal Protection****WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

| Substance | TWA |                   | STEL |                   |
|-----------|-----|-------------------|------|-------------------|
|           | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

**Engineering Controls / Industrial Hygiene**

Ensure adequate ventilation.

**Personal Protection Equipment**

|                    |  |
|--------------------|--|
| <b>Eyes</b>        | Safety goggles with side-shields.  |
| <b>Hands</b>       | Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)).  |
| <b>Skin</b>        | Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.                                  |
| <b>Respiratory</b> | Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles.               |
| <b>General</b>     | Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. |

**Section 9****Physical and Chemical Properties**

|   |                        |
|---|------------------------|
| <b>Appearance</b>                       | Suspension Concentrate |
| <b>Colour</b>                           | Off white – brownish   |
| <b>Odour</b>                            | Characteristic         |
| <b>Odour Threshold</b>                  | Not available          |
| <b>pH</b>                               | 5.5 – 6.0              |
| <b>Melting Point/Boiling Point</b>      | Not available          |
| <b>Freezing Point</b>                   | Not available          |
| <b>Flash Point</b>                      | Not available          |
| <b>Flammability</b>                     | Not available          |
| <b>Upper and Lower Explosive Limits</b> | Not available          |
| <b>Vapour Pressure</b>                  | Not available          |
| <b>Vapour Density</b>                   | Not available          |
| <b>Density</b>                          | 1.08g/L                |
| <b>Water Solubility</b>                 | Not available          |
| <b>Partition Coefficient:</b>           | Not available          |
| <b>Ignition Temperature</b>             | Not available          |
| <b>Decomposition Temperature</b>        | Not available          |
| <b>Viscosity</b>                        | Not available          |
| <b>Particle Characteristics</b>         | Not available          |

## Section 10. Stability and Reactivity

|   |  |
|---|--|
| <b>Stability of Substance</b>             | Stable under normal storage and handling conditions. |
| <b>Possibility of hazardous reactions</b> | None known.  |
| <b>Conditions to Avoid</b>                | Temperature extremes                                 |
| <b>Incompatible Materials</b>             | Oxidizing agents, acids and alkali.                  |
| <b>Hazardous Decomposition Products</b>   | Carbon and nitrogen oxides.                          |

## Section 11 Toxicological Information

### Acute Effects:

|                   |  |
|-------------------|--|
| <b>Swallowed</b>  | Harmful if swallowed. Acute oral toxicity (LD50): > 268 mg/kg [Rat]. |
| <b>Dermal</b>     | Not applicable. LD50 >5,000 mg/kg (rat)                              |
| <b>Inhalation</b> | Not applicable. LD50 (4h) rat > 2.0 mg/l.                            |
| <b>Eye</b>        | Not applicable.  |
| <b>Skin</b>       | Causes mild skin irritation. May cause an allergic skin reaction.    |

### Chronic Effects:

|                               |  |
|-------------------------------|--|
| <b>Carcinogenicity</b>        | Not applicable.  |
| <b>Reproductive Toxicity</b>  | Not applicable.  |
| <b>Germ Cell Mutagenicity</b> | Not applicable.  |
| <b>Aspiration</b>             | Not applicable.  |
| <b>STOT/SE</b>                | May cause damage to organs through single exposure.                |
| <b>STOT/RE</b>                | May cause damage to organs through prolonged or repeated exposure. |

## Section 12. Ecotoxicological Information

|                                       |   |
|---------------------------------------|---|
| <b>Ecological effects information</b> | 9.1A = Very toxic to aquatic life with long lasting effects.<br>9.3B = Toxic to terrestrial vertebrates.<br>9.4A = Very toxic to terrestrial invertebrates. |
| <b>Persistence and degradability</b>  | No data available   |
| <b>Bioaccumulation</b>                | No data available   |
| <b>Mobility in Soil</b>               | No data available   |
| <b>Other adverse effects</b>          | No data available   |
| <b>Acute fish toxicity:</b>           | LC50 (96h) Bluegill sunfish > 0.9mg/l. Rainbow trout: > 0.65 mg/l   |
| <b>Toxicity for daphnia:</b>          | EC50 (48h) > 0.60 mg/l.   |
| <b>Toxicity to algae:</b>             | EC50 (96 h) > 0.11 mg/l.  |
| <b>Precautions:</b>                   | Do not allow to enter waterways.  |

## Section 13. Disposal Considerations

### Disposal Method:

Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal.



### Empty container precautions:

Avoid contamination of any water supply with chemical or empty container.

**Precautions or methods to avoid:** Avoid release to the environment.

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



### Road, Rail, Sea and Air Transport

|  |   |
|--|---|
| <b>UN No</b>                                 | 3082  |
| <b>Class - Primary</b>                       | 9   |
| <b>Packing Group</b>                         | III   |
| <b>Proper Shipping Name</b>                  | <b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDOXACARB)</b>   |
| <b>Marine Pollutant</b>                      | Yes   |
| <b>Special Provisions-Limited Quantities</b> | If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG. |

### Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR100664

HSNO Classification: 6.1D(oral), 6.3B, 6.5B, 6.9A, 9.1A, 9.3B, 9.4A

| HSW (HS) Regulations 2017                      | Trigger Quantity   |
|--|--|
| Certified Handlers                             | Not required   |
| Location Certificate                           | Not required   |
| Signage Trigger Quantities (Schedule 3)        | 100L (9.1A)  |
| Emergency Response Plan (Schedule 5)           | 100L (9.1A)  |
| Secondary Containment (Schedule 5)             | 100L (9.1A)  |
| Tracking (Schedule 26)                         | Not required   |
| For all further controls                       | Refer to EPA <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls document - HSR100664  |
| HSNO Additional Controls (Restrictions of use) |  |
| 77A  | <p>a) The maximum application rate for this substance is 120g ai/ha.</p> <p>b) The substance must not be applied into or onto water [1].<br/>[1] where 'water' means water in all its physical forms, whether flowing or not, and whether over or under ground, but does not include water in any form while in a pipe, tank or cistern or water used in the dilution of the substance prior to application or water used to rinse the container after use.</p> <p>C: Additional label information has been specified.<br/><b>Variation:</b><br/>This substance can be harmful to beneficial arthropods such as the parasitoid <i>Aphidius rhopalosiphi</i>.</p> |

| <b>Hazardous Property Controls Notice 2017</b>  |  |
|---|--|
| HPC Notice Part 4 Clause 47   | Equipment for class 9 substances must be appropriate                     |
| HPC Notice Part 4 Clause 48   | Records of application of class 9 pesticides and plant growth regulators |
| HPC Notice Part 3   | Hazardous substances in a place other than a workplace.                  |
| HPC Notice Part 4 Subpart A   | Site and storage controls for class 9 substances                         |
| HPC Notice Part 4 Subpart C   | Qualifications required for application of class 9 pesticides.           |
| <b>ACVM Act and Regulations</b>   |  |
| ACVM Approval No<br>See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a><br>for registration controls | P8476  |

## **Section 16 Other Information**

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

### **Glossary**

|                  |   |
|------------------|---|
| EC <sub>50</sub> | Median effective concentration.   |
| EEL              | Environmental Exposure Limit.   |
| EPA              | Environmental Protection Authority  |
| HSNO             | Hazardous Substances and New Organisms.   |
| HSW              | Health and Safety at Work.  |
| LC <sub>50</sub> | Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it. |
| LD <sub>50</sub> | Lethal dose to kill 50% of test animals/organisms.                                      |
| LEL              | Lower explosive level.  |
| OSHA             | American Occupational Safety and Health Administration.                                 |
| TEL              | Tolerable Exposure Limit.   |
| TLV              | Threshold Limit Value-an exposure limit set by responsible authority.                   |
| UEL              | Upper Explosive Level   |
| WES              | Workplace Exposure Limit  |

### **References:**

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

### **Disclaimer**

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Please contact Adria, if further information is required.

Issue Date: 29 October 2018      Review Date: 29 October 2023