SAFETY DATA SHEET

Section 1: Identification of the Product and Company

Product name: ZOOTER SEED TREATMENT INSECTICIDE

IMIDACLOPRID 600g/L SC Other names:

Use: For seed treatment in Agriculture

SAFETY

Company name &

Company: Sherwood Chemicals Australasia Pty Ltd Contact

details

Address: Level 3, 1060 Hay Street, WEST PERTH 6005 AUSTRALIA

Emergency Telephone number: All hours +61 421 667972

Other information: All reasonable care has been taken to ensure the information and advice

contained in this data sheet is accurate at the time of printing. However, Sherwood Chemicals accepts no liability for any loss or damages suffered as a consequence of reliance upon the information contained herein.

Section 2: Hazards Identification

STATEMENT OF **HAZARDOUS NATURE**

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.

RISK

Harmful if swallowed.

■ Very toxic to aquatic organisms, may cause long- term adverse effects in the aquatic environment.

- Do not breathe gas/fumes/vapour/spray.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- Avoid exposure obtain special instructions before use.
- To clean the floor and all objects contaminated by this material, use water.
- · Keep container tightly closed.
- This material and its container must be disposed of in a safe way.
- Keep away from food, drink and animal feeding stuffs.
- · If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
- Use appropriate container to avoid environmental contamination.
- Avoid release to the environment. Refer to special instructions/Safety data sheets.
- This material and its container must be disposed of as hazardous waste.

Section 3: Composition / Information on Ingredients **Chemical entity** CAS N° Concentration g/L imidacloprid 138261-41-3 600g/L 56-81-5 Not Spec glycerol < 200 g/L Other ingredients (Non-hazardous)

SDS - ZOOTER SEED TREATMENT INSECTICIDE

Section 4: First Aid Measures

SWALLOWED

- \blacksquare IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition

EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- If skin or hair contact occurs:
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- \blacksquare If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

NOTES TO PHYSICIAN

- for neonicotinoid intoxications:
- No specific antidotes are known.
- 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

Section 5: Fire Fighting Measures

Extinguishing media:

- - Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

FIRE FIGHTING

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area. When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 100 metres in all directions.

FIRE/EXPLOSION

- Combustible.
- Slight fire hazard when exposed to heat or flame.

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HAZARD - Heating may cause expansion or decomposition leading to violent rupture

of containers.

- On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2), hydrogen chloride,

phosgene, nitrogen oxides (NOx), other pyrolysis products

typical of burning organic material.

FIRE INCOMPATIBILITY - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids,

chlorine bleaches, pool chlorine etc. as ignition

may result

HAZCHEM •3Z

Personal Protective

Breathing apparatus.

Equipment Gas tight chemical resistant suit.

Limit exposure duration to 1 BA set 30 mins.

Section 6: Accidental Release Measures

In Case of Spill or Leak MINOR SPILLS

■ Environmental hazard - contain spillage.

- Clean up waste regularly and abnormal spills immediately.
- Avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves, safety glasses and dust respirator.
- Use dry clean up procedures and avoid generating dust.

MAJOR SPILLS

■ Environmental hazard - contain spillage.

Moderate hazard.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7: Handling and Storage

PROCEDURE FOR HANDLING

- - Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

- - Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labeled and free from leaks.

STORAGE INCOMPATIBILITY

■ - Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

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Section 8: Exposure Controls and Personal Protection

EXPOSURE CONTROLS

Source Material TWA mg/m³ Notes

Australia Exposure Standards glycerol (Glycerin mist (a)) 10 (see Chapter 14)

The following materials had no OELs on our records

• imidacloprid: CAS:138261- 41- 3 CAS:105827- 78- 9

PERSONAL PROTECTION RESPIRATOR

· type a-p filter of sufficient capacity.

EYE

- - Safety glasses with side shields
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document,

describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

- - Wear chemical protective gloves, eg. PVC.
- Wear safety footwear or safety gumboots, eq. Rubber.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity.

OTHER

- - Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

ENGINEERING CONTROLS

■ Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator.

Section 9: Physical and Chemical Properties

Appearance: Red to pink to liquid suspension; mixes with water.

Odour: Negligible
Melting Point: Not Applicable
Boiling Point: Not Available

Specific Gravity/Density: 1.23
pH: 6.5- 7.5
Flash Point (°C) >93.4
Boiling Range (°C) >100

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Section 10: Chemical Stability and Reactivity Information

CONDITIONS CONTRIBUTING TO INSTABILITY

- - Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11: Toxicological Information

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH ■ Harmful if swallowed.

EFFECTS

CHRONIC HEALTH ■ - Generally not applicable.

EFFECTS

TOXICITY ■ unless otherwise specified data extracted from RTECS - Register of Toxic

IRRITATION Effects of Chemical Substances.

IMIDACLOPRID:

TOXICITY IRRITATION

Oral (rat) LD50: 410 mg/kg Eye (rabbit): non- irritating *

Oral (mouse) LD50: 150 mg/kg * Skin (rabbit): non- irritating *

Inhalation (rat) LC50: >5323 mg/kg Inhalation (rat) LC50: >69 mg/m³/4h * Dermal (rat) LD50: >5000 mg/kg

■ [* The Pesticides Manual, Incorporating The Agrochemicals Handbook, 10th Edition, Editor Clive

Tomlin, 1994, British Crop Protection Council].

ADI 0.057 mg/kg bw. *

GLYCEROL:

TOXICITY IRRITATION

Oral (Rat) LD50: 12600 mg/kg Oral (Guinea pig) LD50: 7750 mg/kg Oral (Human) TDLo: 1428 mg/kg Intraperitoneal (Rat) LD50: 4420 mg/kg Subcutaneous (Rat) LD50: 100 mg/kg Intravenous (Rat) LD50: 5566 mg/kg

Oral (Mouse) LD50: 4090 mg/kg

Intraperitoneal (Mouse) LD50: 8700 mg/kg Subcutaneous (Mouse) LD50: 91 mg/kg

Intravenous (Mouse) LD50: 4250 mg/kg

■ For glycerol:

Acute toxicity: Glycerol is of a low order of acute oral and dermal toxicity with LD50 values in excess of 4000 mg/kg bw. At very high dose levels, the signs of toxicity include tremor and hyperaemia of the gastro-intestinal -tract.

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Section 12: Ecological Information

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

Eco-Acute Toxicity

Ecotoxicity

Ingredient Persistence

Water/Soil: Persistence: Air Bioaccumulation Mobility

ZOOTER 600SC No Data No Data

Imidacloprid HIGH No Data LOW MED

Section 13: Disposal Considerations

Disposal

- - Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14: Transport Information

- Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;
- (a) packagings;
- (b) IBCs; or
- (c) any other receptacle not exceeding 500 kg(L).
- Australian Special Provisions (SP AU01) ADG Code 7th Ed.

Labels Required: MISCELLANEOUS

Proper shipping: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(contains imidacloprid 60%)

Name Class 9

Subsidiary Risk:

Packing Group:PG IIIUN Code3082

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Section 15: Regulatory Information

Agricultural or veterinary chemicals legislation POISONS SCHEDULE

This product is registered for use by the APVMA. **AUSTRALIA APVMA Registration No.** 66602

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Section 16: Other Information

Emergency Telephone number: All hours Tel: +61 421 667972

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Sherwood Chemicals Australasia Pty Ltd

Address: Level 3, 1060 Hay Street, WEST PERTH 6005 AUSTRALIA

MSDS Updated date: 1st May 2014

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END OF MSDS