

SAFETY DATA SHEET

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

Section 1. Identification of the material and the supplier

Product:	Topstar
Product Use:	Insecticide
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	Adria Crop Protection Solutions
Address:	407 State Highway 16 Kumeu 0841, Auckland
Telephone:	+64 9 412 9817
Website:	www.adria.nz
Emergency No:	0800 734 607 (24hr) 0800 764 766 (National Poison Centre)
Date of SDS Preparation:	5 April 2023 v2

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR000715

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Carcinogenicity Cat. 2	H351	Suspected of causing cancer.
Reproductive toxicity Cat. 2	H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	H423	Hazardous to soil organisms
Hazardous to terrestrial vertebrates	H432	Hazardous to terrestrial vertebrates
Hazardous to terrestrial invertebrates	H443	Hazardous to terrestrial invertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe fumes, vapours and spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.

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.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P308 + P313	IF exposed or concerned: 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 (%)	CAS NUMBER.
Thiacloprid	48.00	111988-49-9
Not 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	Wash immediately with soap and water. Seek medical attention if irritation persists.
If Swallowed	Do NOT induce vomiting if swallowed. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766) or seek medical attention 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. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Harmful if swallowed.
Inhalation:	Not applicable.
Skin:	Not applicable.
Eye:	Not applicable.

- Chronic:** May cause damage to organs through repeated or prolonged exposure. Suspected of causing cancer. Suspected of damaging fertility or the unborn child.
- Treatment:** Treat according to symptoms (decontamination, vital functions). No known specific antidote.

Section 5. Fire Fighting Measures

Hazard Type	This product is Non-Flammable.
Hazards from products	If involved in a fire, it may emit: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur dioxide (SO ₂), Nitrous gases (NO _x).
Suitable Extinguishing media	Dry chemical, water spray, foam, carbon dioxide.
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Personal precautions:

Use protective clothing as per Section 8. 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.

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:

- Keep out of reach of children.
- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe fumes, vapours and spray.
- Avoid contact with skin and eyes.
- Ventilation required.
- Keep away from: sparks, open flame and direct sunlight.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Use personal protective equipment as required.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Keep away from heat and protect from sunlight.
- Protect against freezing.

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

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 APRIL 2022 13TH EDITION.

Engineering Controls / Industrial Hygiene

Ensure there is sufficient ventilation of the area.

Personal Protection Equipment

Eyes	Safety goggles with side-shields.
Hands	Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.
Skin	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
Respiratory	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles.
General	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use and wash hands and face before breaks and after work.

Section 9**Physical and Chemical Properties**

Appearance	Liquid
Colour	White
Odour	Non-specific
Odour Threshold	Not available
pH	+/- 5.5
Boiling/Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Density	1.1.2g/ml
Water Solubility	Not available
Partition Coefficient:	Not available
Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	Not available
Surface tension	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	None known.
Conditions to Avoid	None known.
Incompatible Materials	None known.
Hazardous Decomposition Products	If involved in a fire, it may emit: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur dioxide (SO ₂), Nitrous gases (NO _x).

Section 11 Toxicological Information**Acute Effects:**

Swallowed	Harmful if swallowed. LD50 = >500mg/kg
Dermal	Not applicable. LD50 = >4000mg/kg
Inhalation	Not applicable. LC50 = ± 2 mg/L
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Suspected of causing cancer
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to organs through prolonged or repeated exposure.

Section 12. Ecotoxicological Information

Ecological effects information	Very toxic to aquatic life with long lasting effects. Hazardous to soil organisms. Hazardous to terrestrial vertebrates. Hazardous to terrestrial invertebrates.
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Acute fish toxicity:	LC50 (96 h) for rainbow trout 30.5, bluegill sunfish 25.2 mg/l.
Toxicity for daphnia:	EC50 (48 h, 20 °C) ≥85.1 mg/l.
Toxicity to algae:	ErC50 (72 h, 20 °C) for Scenedesmus subspicatus 97 mg/l; EC50 for Pseudokirchneriella subcapitata >100 mg/l.
Precautions:	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.

Section 14	Transport Information
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This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2020

**Road, Rail, Sea and Air Transport**

UN No	3082
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIACLOPRID 48%)
Marine Pollutant	Yes
Special Provisions-Limited Quantities	If the product's individual container is below 5L/kg, 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
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This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR000715

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 5)	100L
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA www.epa.govt.nz for controls document - HSR000715
HSNO Additional Controls (Restrictions of use)	
77A	This substance must not be applied onto or into water.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P7814

Section 16	Other Information
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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

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	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:

EPA Hazardous Substances (Safety Data Sheets) Notice 2017
Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
Assigning a hazardous substance to a HSNO Approval (Aug 2013).
Transport of Dangerous goods on land NZS 5433:2020
HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact Adria, if further information is required.

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