SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**APOLLO 500 SC**
Chemical name of active	3,6-bis(ochlorophenyl)-1,2,4,5-tetrazine
Product Use:	Miticide
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	ADAMA New Zealand Ltd
Address:	Level 1/93 Bolt Road Tahunanui, 7011, Nelson
Telephone:	+64 3 543 8275
Fax Number:	+64 3 543 8274
Emergency Telephone:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	10 July 2018

Section 2. Hazards Identification

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

EPA Approval No: HSR000775

Pictograms

Chronic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.9B	H373	May Cause damage to organs through prolonged or repeated exposure.	STOT RE 2
9.3C	H433	Harmful to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P103	Read label before use.
P260	Do not breathe fumes, vapours or spray.
P273	Avoid release to the environment.

Response Code	Response Statement
P314	Get medical help if you feel unwell.

Storage Code	Storage Statement
None Allocated	

Disposal Code	Disposal Statement
P501	Refer to Section 13

Section 3. Composition / Information on Ingredients

Ingredients	Value	CAS NUMBER.
Clofentezine	500g/l	7415-24-5
Other ingredients not contributing to the overall classification of the substance or non hazardous	To balance	NA

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Rinse cautiously with water for 15 minutes. Continue rinsing. If eye irritation persists: Get medical advice/attention.

If on Skin — Wash off immediately with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.

If Swallowed — Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

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. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed
Symptoms:
Ingestion: Not applicable.
Skin: Not applicable.
Inhalation: Not applicable.
Eyes: Not applicable.
Chronic: May cause damage to organs through prolonged or repeated exposure.
Notes to a physician: There is no specific antidote. Treat symptomatically and give supportive therapy.

Section 5. Fire Fighting Measures

Hazard Type	Not Flammable.
Hazardous thermal (de)composition products	Emits toxic fumes
Suitable Extinguishing media	Dry chemical, water spray, foam, carbon dioxide.
Precautions for firefighters and special protective clothing	Wear protective clothing, Self-contained breathing apparatus and do not breathe fumes.
HAZCHEM CODE	**None allocated**

Section 6. Accidental Release Measures

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel.

Environmental precautions
Do not allow into any sewer, on the ground or into any body of water.

Methods and material for containment and cleaning up
Collect and contain as much free liquid as possible. Absorb in sand or other inert material. Disposal according to the local legislation. Wash away remainder with water and soap – collect and contain as much free liquid as possible for later disposal.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours or stray.
- Wash hands after working with this product.
- Avoid release to the environment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.
- As a Class 9 Substance with Ecotoxicity Classifications storage of Apollo Miticide must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.
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Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		STEL	
Substance	**ppm**	**mg/m3**	**ppm**	**mg/m3**

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
Ensure adequate ventilation.

Personal Protection Equipment

Eyes	Safety goggles or face shield.
Hands and Skin	Wear chemical resistant gloves (PVC or Nitrile), wear suitable protective clothing.
Respiratory	Not required.
General	When handling do not eat, drink or smoke. Wash hands thoroughly after handling.

	Wash clothing separately before re-use.

Section 9 Physical and Chemical Properties

Appearance	Red (magenta) Liquid
Odour	Odourless
Odour Threshold	Not applicable
pH	6-7.5
Boiling Point	Not applicable
Melting Point	Not applicable
Flash Point	Not applicable
Flammability	Not applicable
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure (air=t)	As for water
Density	Not applicable
Bulk Density	Not applicable
Relative Density	Not applicable
Solubilities in water	Miscible
Auto-ignition Temperature	Not applicable
Octanol/water partition Coefficient	log Pow= 3.1 (Clofentezine)
Volatiles	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Avoid heat.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known under conditions of normal use and storage.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable. LD50 (rat) > 5,000 mg/kg
Dermal	Not applicable. LD50 (rat) > 5,000 mg/kg
Inhalation	Not applicable.
Eye	Slightly irritating (rabbit).
Skin	Slightly irritant (rabbit).

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
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

HSNO Classes: 9.3C = Harmful to terrestrial vertebrates.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Common name: Clofentezine

Mobility: Immobile in soil

Persistence/degradability: Soil DT50 = 30 – 135 days
Water DT50 = 248 hours (pH5.0), 34 hours (pH 7.0) 4 hours (pH 9.0)

Bioaccumulative potential: Does not bioaccumulate in fish
BCF = 248

Ecotoxicity: **Fish**
Birds LD50 > 3000 mg/kg (mallard duck)
Bees: Low toxicity

Daphnia LC50 = 200mg/L(48 hours)
Algae EC50 = 100 mg/L (72 hours)
Fish: LC50 = 20mg/L (rainbow trout) (96 hours)
LC50 = 200mg/L (bluegill sunfish) (96 hours)

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Container Disposal - Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.

Precautions and methods to avoid: Do not allow product to enter waterways.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Section 15 Regulatory Information

EPA Approval Code: HSR000775
HSNO Classification: 6.9B, 9.3C

HSW (HS) Regulations 2017 and EPA Notices	**Trigger Quantity**
Certified Handlers	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L(9.3C)
Emergency Response Plan	Not required
Secondary Containment	Not required
HSNO Additional Controls (Restrictions of use)	
77A	This substance must not be applied onto or into water.
Hazardous Property Controls Notice 2017	
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 4 Subpart A	Site and storage controls for class 9 substances

ACVM Act and Regulations	
Registered pursuant to the ACVM Act 1997, See www.nzfsa.govt.nz/acvm for registration conditions	No. P7251
For all further controls	Refer to EPA website (www.epa.govt.nz) for controls document - HSR000775

Section 16 Other Information

Glossary

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
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:

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

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the Adama, if further information is required.

Issue Date: 10 July 2018 Review Date: 10 July 2023