

# SAFETY DATA SHEET

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

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

Product: Voltage  
Product Use: Herbicide  
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  
Fax: +64 9 412 9807  
Website: www.adria.nz

**Emergency No: 0800 734 607 (24hr)**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 17 May 2021

## Section 2. Hazards Identification

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

**EPA Approval No: HSR101441**

**Pictograms:**



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Acute inhalation toxicity Cat. 4	H332	Harmful if inhaled.
Skin irritation Cat. 2	H315	Causes skin irritation.
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Reproductive toxicity Cat. 1	H360	May damage fertility or the unborn child.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.

specific target organ toxicity – single exposure Cat. 3 respiratory tract irritation	H335	May cause respiratory irritation.
Narcotic effects	H336	May cause drowsiness or dizziness.
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.

<b>Prevention Code</b>	<b>Prevention Statement</b>
P102	Keep out of reach of children.
P103	Read label before use.
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.
P271	Use only outdoors or in a well-ventilated area.
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.
P281	Use personal protective equipment as required.

<b>Response code</b>	<b>Response Statement</b>
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P362	Take off contaminated clothing and wash before re-use.
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.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

<b>Storage Code</b>	<b>Storage Statement</b>
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Refer to Section 13.

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

<b>Ingredients</b>	<b>Content (%w/w)</b>	<b>CAS NUMBER.</b>
Pinoxaden (8-(2,6-diethyl-4-methylphenyl)-9-oxo-1H,2H,4H,5H,9H-pyrazolo[1,2-d][1,4,5]oxadiazepin-7-yl 2,2-dimethylpropanoate)	<11%	243973-20-8

Cloquintocet mexyl ((2R)-heptan-2-yl 2-[(5-chloroquinolin-8-yl)oxy]acetate (2S)-heptan-2-yl 2-[(5-chloroquinolin-8-yl)oxy]acetate)	<3%	99607-70-2
Tetrahydrofurfuryl alcohol	<60%	97-99-4
Solvent naphtha (petroleum), Heavy aromatic	<20%	64742-94-5

#### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on Skin	Take off contaminated clothing and wash before re-use. Wash skin with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
If Swallowed	Rinse mouth. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Immediately call a POISON CENTER or doctor/physician.
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:

<b>Ingestion:</b>	Harmful if swallowed.
<b>Inhalation:</b>	Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.
<b>Skin:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye:</b>	Causes serious eye irritation.
<b>Chronic:</b>	May cause damage to organs through prolonged or repeated exposure. May damage fertility or the unborn child.

Treatment: Treatment: Treat according to symptoms (decontamination, vital functions). No known specific antidote.

#### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	This product is not flammable or combustible.
<b>Hazards from products</b>	Fire might produce dense black smoke containing hazardous products of combustion (toxic and irritant vapours). Exposure to decomposition products may be hazardous to human health.
<b>Suitable Extinguishing media</b>	Water spray, carbon dioxide (CO <sub>2</sub> ), alcohol resistant foam, dry chemical. Do not use a solid water stream as it may scatter and spread fire.
<b>Recommended protective clothing &amp; Precautions for firefighters</b>	Wear SCBA and chemical-protective clothing. Self-contained breathing apparatus is required. Do not allow the run off from firefighting media to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Addition of water may cause excessive foaming. Vapours may be toxic.
<b>HAZCHEM CODE</b>	<b>3Z</b>

## 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 i.e. clay granules, sand or other absorbent material and place in waste containers. Wash area with water and absorb with further inert material. Return empty container to an AgRecovery collection point for disposal. Dispose of waste safely, according to local Council regulations.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid contact with skin and eyes.
- Do not breathe fumes, vapours and spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Keep away from: sparks, open flame and direct sunlight.
- Keep containers tightly closed.
- Chemical resistant gloves and eye protection should be worn when handling this product. Other personal protective equipment appropriate to the situation when handling product, eg Full body cover [ankle to wrist clothing and boots] should also be worn. Wash protective clothing daily after work.
- Use personal protective equipment as required.

### Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store securely out of reach of children and locked up.
- Keep away from heat and protect from sunlight.
- Protect against freezing.
- Store in original container, tightly closed away from food, food related materials, animal feedstuffs, seed or fertilizer.

## 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 2019 11TH EDITION.

## Engineering Controls

Comply with occupational safety, environmental, fire and other applicable regulations.

## Personal Protection Equipment



<b>Eyes</b>	Safety goggles with side-shields.
<b>Hands</b>	Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)). Contaminated gloves should be washed. Gloves should be disposed of when contaminated on the inside, perforated or contamination on the outside cannot be removed.
<b>Skin</b>	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure. Decontaminate contaminated clothing, remove and dispose of in accordance with the manufacturer's instructions.
<b>Respiratory</b>	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles. Respiratory protection is not normally required except during the formation of mists or aerosols or in the case of fire.
<b>General</b>	Females of childbearing age should not come into contact with the product. Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. Potentially fatal if inhaled. When handling wear full protective clothing such as gloves, hat, coat and trousers (worn outside rubber boots). Suitable or appropriate respiratory and eye protection should also be worn. The use of a skin barrier cream is useful to give additional skin protection.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Liquid EC
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	No data available
<b>pH</b>	4 - 6
<b>Melting/Boiling Point</b>	No data available
<b>Freezing Point</b>	No data available
<b>Flash Point</b>	Not applicable
<b>Flammability</b>	Non-flammable
<b>Upper and Lower Explosive Limits</b>	Not applicable
<b>Vapour Pressure</b>	No data available
<b>Vapour Density</b>	No data available
<b>Relative Density</b>	1.05 g/L
<b>Water Solubility</b>	Emulsifies in water
<b>Ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available
<b>Surface tension</b>	Not available

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None known.
<b>Conditions to Avoid</b>	Temperature extremes and direct sunlight.
<b>Incompatible Materials</b>	Store only in original containers.

<b>Hazardous Decomposition Products</b>	Combustion or thermal decomposition will evolve toxic and irritant vapors.
-----------------------------------------	----------------------------------------------------------------------------

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Harmful if swallowed: LD50 (rat) 5000 mg/kg
<b>Dermal</b>	Not applicable. LD50 (rat) >2000 mg/kg
<b>Inhalation</b>	Harmful if inhaled. LC50 (rat -male) 4.63 mg/L (4 hours) May cause respiratory irritation. May cause drowsiness or dizziness.
<b>Eye</b>	Causes serious eye irritation.
<b>Skin</b>	Causes skin irritation. May cause an allergic skin reaction.

### Chronic Effects:

<b>Carcinogenicity</b>	No data available
<b>Reproductive Toxicity</b>	May damage fertility or the unborn child.
<b>Germ Cell Mutagenicity</b>	No data available
<b>Aspiration</b>	No data available
<b>STOT/SE</b>	No data available
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

## Section 12. Ecotoxicological Information

<b>Ecological effects information</b>	Very toxic to aquatic life with long lasting effects.
<b>Persistence and degradability</b>	Parent pinoxaden is rapidly metabolized (DT <sub>50</sub> <1 d) and is rapidly degraded in plants (DT <sub>50</sub> <1 d)
<b>Bioaccumulation</b>	Degrades quickly, DT <sub>50</sub> <1 d. Pinoxaden and its degradation products are not persistent and do not accumulate in soil. K <sub>oc</sub> 121-852 ml/g (median 323, 9 soils).
<b>Mobility in Soil</b>	Does not leach into groundwater.
<b>Other adverse effects</b>	No other effects
<b>Acute fish toxicity:</b>	LC50 (96 hr) rainbow trout 10.3, fathead minnows 20, sheepshead minnows 16
<b>Toxicity for daphnia:</b>	EC50 (48hr) for daphnia 52mg/l
<b>Toxicity to algae:</b>	EbC50 (96h static): <i>Navicula pelliculosa</i> 10.2, <i>Anabaena flos-aquae</i> 5.0, <i>Skeletonema costatum</i> 0.909, <i>Pseudokirchneriella subcapitata</i> 16
<b>Toxicity for birds</b>	LD50 = bobwhite quail >2250 mg/kg. Dietary LC <sub>50</sub> (5 d) for bobwhite quail and mallard ducks >5620 mg/kg diet.
<b>Toxicity for worms</b>	LC50 (14 d) = <i>Eisenia fetida</i> >1000
<b>Toxicity bees</b>	LD50 µg/bee] (48 h) ->100 (contact), >200 (oral)
<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.

**Section 14****Transport Information**

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 (Solvent naphtha)</b>
<b>Marine Pollutant</b>	Yes
<b>Special Provisions-Limited Quantities</b>	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**

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

EPA Approval Code: HSR101441

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	100L (Aquatic Acute/Chronic 1)
Emergency Response Plan (Schedule 5)	100L (Aquatic Acute/Chronic 1)
Secondary Containment (Schedule 5)	100L (Aquatic Acute/Chronic 1)
Tracking (Schedule 26)	Not required
<b>HSNO Additional Controls (Restrictions of use)</b>	
For all further controls	Refer to EPA <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls document – HSR101441
<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 2	Certain substances restricted to workplaces only
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
<b>ACVM Act and Regulations</b>	
ACVM Approval No See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration controls	P9867

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

Cat	Category
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

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

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact Adria, if further information is required.

Issue Date: 17 May 2021                      Review Date: 17 May 2026