

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: CLOZONE
OTHER NAME: Capsule concentrate containing 360 g/L clomazone.
USE: Pre-emergent herbicide
SUPPLIER NAME: AGPRO NZ Ltd
SUPPLIER ADDRESS: 10 Polaris Place, East Tamaki, Auckland 2013
PO Box 58-963, Botany, Auckland 2163
SUPPLIER CONTACT: 09 273 3456 or freephone 0508 536 536
www.agpro.co.nz
POISON INFORMATION: National Poison Centre, 0800 POISON (0800 764 766) 24 hours
CHEMICAL EMERGENCY: 0800 CHEMCALL (0800 243 622) 24 hours

2. HAZARDS IDENTIFICATION

NEW ZEALAND: Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996
APPROVAL NUMBER: HSR100797
HAZARD CLASSIFICATIONS: Flammable liquid Category 4, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment chronic Category 2.

PICTOGRAMS:



SIGNAL WORD: WARNING
HAZARD STATEMENTS: Combustible liquid.
Toxic to aquatic life and with long lasting effects.
Very toxic to soil organisms.
Harmful to terrestrial vertebrates.
PREVENTION: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Wear protective gloves and eye or face protection.
Avoid release to the environment.
RESPONSE: Collect spillage.
In case of fire: Stop leak if safe to do so. Extinguish with foam, water fog or spray, carbon dioxide or dry chemical as appropriate to surrounding materials.
STORAGE: Store in a well-ventilated place. Keep container tightly closed.
DISPOSAL: Dispose of unwanted product and used packaging in compliance with local regulations.
TRANSPORT: Clozone is classified as Dangerous Goods Class 9 for Transport.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	% w/w
Clomazone	81777-89-1	27 - 35*
Petroleum distillates	64742-55-8	5 < 10
Calcium chloride	10043-52-4	1 < 5
Sodium nitrate	7631-99-4	1 < 5
Other ingredients	Trade secret	balance

* equivalent to 360 g/L clomazone

4. FIRST - AID MEASURES

Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice. Have product label or SDS at hand.

Ingestion	If swallowed, do NOT induce vomiting. Rinse mouth with water. Contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice.
Inhalation	Remove patient to fresh air. Keep in position comfortable for breathing. If breathing is shallow or has stopped ensure airway is clear, apply resuscitation and seek medical assistance immediately.
Skin contact	Remove contaminated clothing and wash hands and exposed skin thoroughly. If irritation persists, get medical advice.
Eye contact	If in eyes flush with plenty of water holding eyelids open if necessary. Remove contact lenses if present, after a few minutes, then continue flushing with water. Get medical advice if irritation persists.
Advice to Doctor	No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability:	Combustible liquid.
Hazardous Combustion Products:	If involved in a fire, may evolve toxic/harmful compounds.
Extinguishing Media:	Foam, water fog or spray, carbon dioxide or dry chemical as appropriate to surrounding materials.
Protective Equipment:	Full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal:	Wear personal protective clothing, gloves and goggles. Exclude non-essential people from the area. Isolate or remove sources of ignition. No smoking. Contain spillage. Collect spillage in labelled containers than can be closed, for reuse or disposal. For small liquid spills absorb spillage with sawdust or an inert absorbent material, and place in a sealable labelled waste container. Dispose of waste safely in an approved landfill or hazardous waste facility.
Environmental Precautions:	Prevent from entering drains, waterways or sewers. If spill does enter waterways immediately contact local authority. Clozone is a herbicide and spillage on soil may damage crops.

7. HANDLING AND STORAGE

Handling:	Keep out of reach of children. Read label before use. Keep container tightly closed when not in use. Use only according to label. Wear personal protective equipment. Avoid contact with skin and eyes and inhalation of vapours or spray mist. No smoking. Use outdoors or in well-ventilated area. Do not apply directly into or onto water. Take all reasonable steps to ensure the product does not cause any significant adverse effects to the environment beyond the application area. Written record of use required if more than 3L applied within 24 hours in a place where the product is likely to enter air or water and leave the application area. Clozone must be under the personal control of a suitably qualified handler when mixing, loading or
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applying.

Storage: If storing more than 500 L, two fire extinguisher are required. Signage, an emergency response plan and secondary containment are required when more than 1000 L is on site.

Store in original container tightly closed and in a locked, well-ventilated area away from feed, seeds and foodstuff.

For guidance refer to the current version of NZS 8409 Management of Agrichemicals and the Health and Safety at Work (Hazardous Substances) Regulations 2017.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Worksafe NZ (12th edition, November 2020)

<i>Ingredient</i>	<i>Exposure</i>	<i>Form</i>	<i>Ceiling</i>
No ingredient listed	-	-	-

Protective Equipment: When opening the container, preparing to measure, load or when applying: wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Engineering Controls: Handle outdoors or in a well-ventilated area. Use local exhaust ventilation, or other engineering controls as appropriate to conditions.

Hygiene Precautions: Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing and equipment daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown-beige viscous liquid
Odour:	Hydrocarbon
Odour threshold:	No information available
pH (neat)	7.5 – 9.5
Melting point/freezing point:	Not available
Initial boiling point/range:	Not available
Flashpoint:	>63 <93 °C
Flammability (solid, gas):	Not applicable
Upper/lower flammability limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	1.05 -1.3
Solubilities:	Forms an emulsion in water
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	No information available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions in original container for at least two years.
Conditions to avoid:	Keep out of direct sunlight and away from flames/ignition sources.
Incompatible substances or materials:	Relatively stable in neutral, weakly acidic and weakly alkaline media. Hydrolyzed by stronger acids and bases.
Hazardous polymerization:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Not classified as acutely toxic if swallowed, in contact with skin or if inhaled.
Aspiration hazard:	Clozone contains a hydrocarbon solvent but <10% w/w so is not classified as aspirant hazard.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Not classified.
Serious eye damage/irritation:	Not classified.
Respiratory or skin sensitization:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Not classified.
Reproductive toxicity:	Not classified.
Specific organ toxicity:	Not classified. However, it is possible that clomazone may affect the liver.
Narcotic effects:	No components identified with narcotic effects.
Toxicological information:	<u>Clomazone (active)</u> Oral, rat LD ₅₀ 754 mg/kg bw Dermal, rabbit LD ₅₀ 2000 mg/kg bw Inhalation, rat LC ₅₀ (4 hr) 4.35 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Clozone is classified as being toxic to aquatic life and with long-lasting effects. Clozone is also very toxic to the soil environment and harmful to terrestrial vertebrates.
Ecotoxicological information:	<u>Clomazone (active)</u> Fish: <i>Oncorhynchis mykiss</i> LC ₅₀ (96 h) 14.4 g/L Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) 12.7 mg/L Algae: <i>Navicula pelliculose</i> EC ₅₀ (72 hr) growth 0.136 mg/L Aquatic plant: <i>Lemna gibba</i> EC ₅₀ (7d) growth, 34 mg/L Bird: <i>Colinus virginianus</i> LD ₅₀ >2224 mg/kg bw
Persistence and degradability:	DT ₅₀ (typical) 22.6 days; non persistent.
Potential to be bioaccumulative:	Not expected to be bioaccumulative.
Mobility in soil:	Expected to be mobile on soil.
Other adverse effects:	No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal:	Dispose of product only by using according to label or dispose of at an approved landfill.
Container Disposal:	Ensure container is completely empty. Triple rinse with water and add rinsate to spray tank. Dispose of empty clean container to recycler for agricultural chemicals, otherwise crush and bury in an approved landfill. Do not use container for any other purpose.

14. TRANSPORT INFORMATION

UN Number: 3082
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (clomazone 36%)
 DG Class: 9
 Packing Group: III
 Marine Pollutant: Yes
 HAZCHEM 3Z

15. REGULATORY INFORMATION

New Zealand Registered pursuant to the ACVM Act 1997, No. P9662
 See www.foodsafety.govt.nz for registration conditions
 Approved pursuant to the HSNO Act 1996, Approval Code HSR100797
 See www.epa.govt.nz for Controls and www.worksafe.govt.nz.

Qualifications	Qualified Handler.
Tracking:	Not Required
Safety Data Sheet:	Any quantity
Restricted to workplace only:	Not Applicable
Quantity that must be secured when unattended:	Not Applicable
Fire extinguishers	>500 L requires 2 extinguishers
Quantity for secondary containment and emergency response plan:	1000 L
Quantity for signage:	1000 L
Quantity for Location certificate	Not Required
Records of use (3 kg or more applied to area within 24 hours)	Yes
Quantity that requires management in accordance with HSW HS Regulations	Not Applicable

16. OTHER INFORMATION

Version: 2.1

Issue Date: 16 June 2023

Reason for Issue: Supplier's contact details updated.

Replaces: Version 2.1 dated February 2022

References:

Supplier Safety Data Sheets

NZ EPA Approved Hazardous Substances Databases.

Worksafe NZ Workplace Exposure Standards and Biological Exposure Indices

NZS 5433:2020 New Zealand Standard Transport of Dangerous Goods on Land

Abbreviations:

ACVM Agricultural Chemicals and Veterinary Medicines Group
 ADI Acceptable Daily Intakes
 BCF Bioconcentration factor
 CAS Number Chemical Abstracts Service Registry Number

CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC ₅₀	Median Lethal Concentration
LD ₅₀	Median Lethal Dose (50% population)
SDS	Safety Data Sheet
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
TWA	Time-Weighted Average
UN Number	United Nations Number
WES-STEL	Workplace exposure standards – Short-term exposure limit
WES-TWA	Workplace exposure standards – Time-weighted average

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

End of Safety Data Sheet.