

SAFETY DATA SHEET



CLEO[®] Herbicide

Date of Issue: 11th July 2018

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s):	clethodim
Recommended use:	Herbicide
Supplier:	Agrisource 2000 Limited 45 Kitchener Road Pukekohe Phone: 09 237 0422
Emergency telephone number:	0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classifications:	3.1D, 6.1E, 6.3A, 6.4A, 6.9B, 9.1B, 9.2A
Required identification Details:	3.1D: WARNING – Combustible Liquid – Keep away from sources of ignition. 6.1E: HARMFUL – May be harmful if swallowed, inhaled or absorbed through the skin. 6.3A: HARMFUL – May cause skin irritation. 6.4A: HARMFUL – May cause eye irritation. 6.9B: HARMFUL – May cause organ damage from repeated oral exposure at high doses. 9.1B: ECOTOXIC – Toxic to aquatic organisms with long lasting effects. Avoid contamination of any water supply with product or empty container. 9.2A: Very toxic to the soil environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
clethodim	99129-21-2	24%
Liquid Hydrocarbon	64742-95-5	60-70%

4. FIRST-AID MEASURES

Description of necessary first aid measures: In case of poisoning by any exposure route contact the National Poisons and Hazardous Chemicals Information Centre, PO Box 913, Dunedin. **Phone 0800 764 766, (0800 POISON).**

General information:	Remove the affected person from the source of exposure. Remove all contaminated clothing and wash affected area. If you feel unwell seek medical attention.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
Skin contact:	In case of skin contact, immediately flush skin with plenty of water and soap. Remove contaminated clothing. Cold water may be used. Wash clothing before reuse. Get medical attention if irritation persists.
Eye contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.
Advice to Physician:	No specific antidote is known. Treat symptomatically. Main hazard is solvent entering lungs – may lead to chemical pneumonitis.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	2X
Extinguishing media :	Dry chemical, carbon dioxide, foam, water mist. Do not use high power water jet.
Fire and Explosion Hazard:	Product is flammable. Combustion may release carbon Dioxide, nitrogen oxides, and or chlorine compounds.
Protection of fire-fighters:	Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or gases. All run-off must be contained.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Release or Spill: Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and an approved pesticide respirator or air-supplied respirator.
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Environmental precautions:

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

Methods for cleaning up:

Clear area of unnecessary personnel. Extinguish any sources of ignition. Spills may be slippery and should be cleaned up immediately. Large spill: Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimise runoff into waterways or drains.requirements of Local Authorities

7. HANDLING AND STORAGE**Handling:**

When mixing or applying, avoid inhalation of vapors or spray mist and contact with skin and eyes. Wear protective clothing, gloves and goggles. Do not eat or drink while using. Wash hands and face before meals and after work. Wash protective clothing after work.

Storage:

Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs. Keep out of reach of children. Store in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Packaging materials:

HDPE Plastic bottle.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering measures****Exposure control measures:**

Ensure ventilation is adequate, generally natural ventilation is adequate.

Personal Protective Equipment**Detail specifications for equipment:****Respiratory system:**

Where insufficient ventilation, use suitable respiratory protection.

Skin and body:

When opening the container, preparing spray and using prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

Hands:

Elbow-length and PVC gloves

Eyes:

Wear chemical goggles or face shield.

General hygiene:

Avoid inhaling aerosols and vapours. Avoid contact with eyes and skin. Store work clothes and street clothes separately. Wash hand before breaks and at the end of work. Change contaminated protective clothing. Keep away from food, drinks and tobacco.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	Amber
Odour:	Aromatic odour
pH:	4.6 (in water)
Vapour pressure:	1×10^{-2} mPa (clethodim)
Boiling Point:	> 100°C
Freezing Point:	< 0°C
Solubility:	Fully emulsifiable
Specific gravity or density:	Approx. 1.1 (refer to specific batch COA)
Flashpoint:	61°C
Combustibility:	Combustible C1

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of use.
Conditions to avoid:	Extreme heat. Direct sunlight, Sources of ignition.
Materials to avoid:	Strong oxidising agents – chlorates, nitrates, peroxides.
Hazardous decomposition Products:	Emits toxic fumes under fire conditions.
Hazardous reactions :	None expected.

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral :	LD ₅₀ >1630mg/kg (rat)
Acute toxicity - Dermal :	LD ₅₀ >5000mg/kg (rabbit)
Acute toxicity – Inhalation	LC ₅₀ >3.9mg/litre (rat 4hr)
Skin irritation :	Moderate Irritant (rabbit)
Eye irritation:	Irritating to eyes (rabbit)
Sensitisation :	Non sensitising (guinea pig)

12. ECOLOGICAL INFORMATION

Information relates to the ai – clethodim

Fish toxicity:	LC ₅₀ (96 hr): 67mg/l (rainbow trout). LC ₅₀ (96 hr): 120mg/l (bluegill sunfish).
Daphnia toxicity:	EC ₅₀ (48hr): 120mg/l (daphnia magna).
Algae toxicity:	EC ₅₀ (72hr): 57mg/l (fresh water algae)
Bird toxicity:	LD ₅₀ >2000/kg bobwhite quail.
Bee toxicity:	LD ₅₀ to bee > 100ug/bee. Acute contact.
Earthworm toxicity:	Acute LC ₅₀ 454mg/kg
Soil, Water, Air:	Does not persist in the soil. Half life varies with soil type and moisture status but is generally a matter of weeks rather than months.

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.

CONTAINER DISPOSAL: Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.

14. TRANSPORT INFORMATION -International transport regulations

UN number:	3082
Class:	9
Packing Group:	III
Marine Pollutant:	Yes
Proper shipping name :	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains clethodim)
INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains clethodim)

15. REGULATORY INFORMATION

ACVM Registered Number:	P8009 (See www.foodsafety.govt.nz for registration Conditions).
HSNO Approval Code:	HSR007818 (See www.epa.govt.nz for controls).
Approved Handler:	This product must be under the personal control of an approved handler or secured.
Tracking:	Not required.

16. OTHER INFORMATION

Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

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