

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: GRASIDIM
 OTHER NAME: Emulsifiable concentrate containing 360 g/L clethodim
 USE: 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: HSR100921
 HAZARD CLASSIFICATIONS: Flammable liquid Category 4, Aspiration hazard Category 1, Skin irritation Category 2, Eye irritation Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment chronic Category 3.

PICTOGRAMS:



SIGNAL WORD: DANGER

HAZARD STATEMENTS: Combustible liquid.
 May be fatal if swallowed and enters airways.
 Causes skin irritation.
 Cause serious eye irritation.
 May cause damage to organs through prolonged or repeated exposure.
 Harmful 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.
 Do not breathe mist/vapours/spray.
 Wash hands thoroughly after handling.
 Wear protective gloves and eye or face protection.
 Avoid release to the environment.

RESPONSE: If medical advice is needed, have product container or label at hand.
 Get medical advice/attention if you feel unwell.
 IF SWALLOWED: Immediately call a POISON CENTRE or doctor. Do NOT induce vomiting.
 IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice.
 Take off contaminated clothing and wash before re-use.
 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.
 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. Store locked up.
DISPOSAL:	Dispose of unwanted product and used packaging in compliance with local regulations.
TRANSPORT:	Hambeet is NOT classified as Dangerous Goods for Transport.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	% w/w
Clethodim	99129-21-2	35 - 37*
Calcium dodecylbenzene sulphonate	26264-06-2	1 - 3
Neutralised ethoxylated alkylamine	Trade secret	1 – 3
Solvent naphtha dearomatised	64742-48-9	50 – 60
Other ingredients	Trade secret	balance

* equivalent to 360 g/L clethodim

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. Immediately contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor for advice. May be fatal if swallowed and enters airways.
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 with soap and running water. 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. Flashpoint 63°C.
Hazardous Combustion Products:	If involved in a fire, may evolve toxic/harmful compounds including oxides of sulphur, nitrogen and carbon.
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 equipment. 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. Absorb spills with inert 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. Gracidim 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.
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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 records of use are required if more than 3 kg (3L) applied within 24 hours in a place where the product is likely to enter air or water and leave the application area. Hambeet must be under the control of a Qualified Handler during use.

Storage:

If storing more than 500 L, two fire extinguishers 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 foodstuffs, fertilisers and seeds.

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 ingredients 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:	Amber liquid
Odour:	Hydrocarbon
Odour threshold:	No information available.
pH	5.0 - 7.0 (1% aqueous dilution)
Melting point/freezing point:	Not available
Initial boiling point/range:	Not available
Flashpoint:	<93 °C
Flammability (solid, gas):	Not applicable
Upper/lower flammability limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	1.03 -1.04
Solubilities:	Forms 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:	Grasidim contains a hydrocarbon solvent at >10% w/w and is classified as an aspiration hazard.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Skin irritant.
Serious eye damage/irritation:	Severe eye irritant.
Respiratory or skin sensitization:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Not classified.
Reproductive toxicity:	Not classified.
Specific organ toxicity:	May cause damage organs or systems through prolonged or repeated exposure. Clethodim has been identified as affecting the liver and red blood cells.
Narcotic effects:	No components identified with narcotic effects.
Toxicological information:	<u>Clethodim (active)</u> Oral, rat LD ₅₀ 1360 mg/kg bw Dermal, rabbit LD ₅₀ 4167 mg/kg bw Inhalation, rat LC ₅₀ (4 hr) <3.25 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Grasidim is classified as being harmful to aquatic life with long-lasting effects. Grasidim is also very toxic to the soil environment and harmful to terrestrial vertebrates.
Ecotoxicological information:	<u>Clethodim (active)</u> Fish: <i>Salmo gairdneri</i> LC ₅₀ (96 h) 25 g/L Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) >100 mg/L Algae: <i>Pseudokircheriella subcapitata</i> EC ₅₀ (72 hr) growth >12 mg/L Aquatic plant: <i>Lemna gibba</i> EC ₅₀ (7d) growth, 1.9 mg/L Bird: <i>Colinus virginianus</i> LD ₅₀ >1640 mg/kg bw
Persistence and degradability:	DT ₅₀ (typical) 0.55 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.
Environmental Exposure Limits (EEL):	Not Applicable.

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 add rinsate to the 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

- Not classified as Dangerous Goods for the purposes of transportation according to NZS 5433:2020.
- Do not carry more than 1 litre of Grasidim on a passenger services vehicle.

15. REGULATORY INFORMATION

- New Zealand Registered pursuant to the ACVM Act 1997, No. P8967
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR100921
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:	No
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: SDS January 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.