

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT NAME: HAMBEET

OTHER NAME: Emulsifiable concentrate containing 160 g/L phenmedipham and 160 g/L desmedipham

USE: Herbicide for control of broad-leaved weeds in fodder, sugar and redbeets.

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: HSR101207

HAZARD CLASSIFICATIONS: Flammable liquid Category 4, Eye irritation Category 2, Skin sensitisation Category 1, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to soil organisms, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.

PICTOGRAMS:



SIGNAL WORD: WARNING

HAZARD STATEMENTS:

Combustible liquid.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life and with long lasting effects.

Very Toxic to soil organisms.

Keep away for heat/sparks/open flames/hot surfaces. No smoking.

Do not breathe mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

Wash hands thoroughly after handling.

Wear protective gloves and eye or face protection.

Avoid release to the environment.

RESPONSE:

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice.

Wash contaminated clothing 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.

Collect spillage.

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:

Hambeet is classified as Dangerous Goods Class 9 for Transport.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	% w/w
Phenmedipham	1684-63-4	16*
Desmedipham	13684-56-5	16*
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	<60
Other ingredients	Trade secret	balance

* equivalent to 160 g/L phenmedipham and 160 g/L desmedipham

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 with soap and running water. If irritation or rash persists, get medical advice. Wash contaminated clothing before reuse.
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 >61 < 93°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. For small liquid spills absorb spillage with vermiculite, earth, sand, or synthetic absorbent substance, and place in a sealable labelled waste container. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material. 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. Hambeet 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. Contaminated work clothing should not be allowed out of the workplace. 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.
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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. HSNO controls application to application method, concentration, intervals and frequency of application.

Qualified Handler: Hambeet is to be under the control of a suitably qualified handler when being mixed, loaded or applied.

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 100 L is on site.

Store in original container tightly closed and in a secure 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:	Yellow to amber liquid
Odour:	Slight
Odour threshold:	No information available
pH (neat)	2.0 - 5.0
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:	ca 1.01
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:	No specific information available.
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:	Not classified.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Not classified.
Serious eye damage/irritation:	Severe eye irritant.
Respiratory or skin sensitization:	Both phenmedipham and desmedipham are identified with risk of causing dermatitis.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Not classified.
Reproductive toxicity:	Not classified. However, the ECHA database identified desmedipham as affecting the unborn child.
Specific organ toxicity:	May cause damage organs or systems through prolonged or repeated exposure. Phenmedipham identified as affecting the liver, kidneys, spleen and blood. Desmedipham may affect the thyroid and blood.
Narcotic effects:	No components identified with narcotic effects.
Toxicological information:	<u>Desmedipham (active)</u> Oral, rat LD ₅₀ >2000 mg/kg bw Dermal, rat LD ₅₀ 2000 mg/kg bw Inhalation, rat LC ₅₀ (4 hr) >7.4mg/L <u>Phenmedipham (active)</u> Oral, rat LD ₅₀ >5000 mg/kg bw Dermal, rat LD ₅₀ 2500 mg/kg bw Inhalation, rat LC ₅₀ (4 hr) >7.0 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Hambeet is classified as being very toxic to aquatic life and with long-lasting effects, and very toxic to the soil environment.
Ecotoxicological information:	<u>Phenmedipham (active)</u> Fish: <i>Oncorhynchus mykiss</i> LC ₅₀ (96 h) 1.84 g/L Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) 2.033 mg/L Algae: <i>Raphiocelis subcapitata</i> EC ₅₀ (72 hr) growth 0.086 mg/L Aquatic plant: <i>Lemna minor</i> EC ₅₀ (7d) growth, >0.157 mg/L Bird: <i>Anas platyrhynchos</i> LD ₅₀ >2500 mg/kg bw <u>Desmedipham (active)</u> Fish: <i>Oncorhynchus mykiss</i> LC ₅₀ (96 h) 1.41 g/L Crustacean: <i>Daphnia magna</i> EC ₅₀ (48 h) 0.35 mg/L Algae: <i>Raphiocelis subcapitata</i> EC ₅₀ (72 hr) growth >0.01 mg/L Aquatic plant: <i>Lemna minor</i> EC ₅₀ (7d) growth, >5.2 mg/L Bird: <i>Colinus virginianus</i> LD ₅₀ >2000 mg/kg bw

Persistence and degradability:	<u>Phenmedipham</u> DT ₅₀ (typical) 12 days. Desmedipham DT ₅₀ (typical) 52 days.
Potential to be bioaccumulative:	Not expected to be bioaccumulative.
Mobility in soil:	Active ingredients have limited solubility in water.
Other adverse effects:	No information available.
Environmental Exposure Limits (EEL)	An EELwater has been set for phenmedipham. The EEL value is 0.1 µg/L. An EELwater has been set for desmedipham. The EEL value is 0.1 µg/L. An EELsoil has been set for phenmedipham. The EEL value is 1 µg/kg (dry weight) of soil. An EELsoil has been set for desmedipham. The EEL value is 1 µg/kg (dry weight) of soil.

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., (phenmedipham 16%, desmedipham 16%)
DG Class:	9
Packing Group:	III
Marine Pollutant:	Yes
HAZCHEM	3Z
Do not carry Hambeet on a passenger service vehicle.	

15. REGULATORY INFORMATION

New Zealand	Registered pursuant to the ACVM Act 1997, No. P9443 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR101207 See www.epa.govt.nz for Controls and www.worksafe.govt.nz .
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Qualifications	Qualified Handler.
Tracking:	Not Required
Safety Data Sheet:	Any quantity
Restricted to workplace only:	No
Quantity that must be secured when unattended:	Not Required
Fire extinguishers	>500 L requires 2 extinguishers
Quantity for secondary containment and emergency response plan:	100 L
Quantity for signage:	100 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 Required
<u>Environmental Exposure Limits</u>	
An EELwater has been set for phenmedipham. The EEL value is 0.1 µg/L.	
An EELwater has been set for desmedipham. The EEL value is 0.1 µg/L.	

An EELsoil has been set for phenmedipham. The EEL value is 1 µg/kg (dry weight) of soil.

An EELsoil has been set for desmedipham. The EEL value is 1 µg/kg (dry weight) of soil.

Additional controls

The maximum application rate of this substance is 720 g of desmedipham/ha and 720 g of phenmedipham/ha.

This substance may be applied up to two times per year. A minimum interval of 10 days must be observed between applications.

This substance must be applied by ground-based methods only.

Any person importing, manufacturing or relabelling this substance must ensure that the label on the substance includes a statement specifying that this substance must not be applied aerially.

16. OTHER INFORMATION

Version: 1.1

Issue Date: 16 June 2023

Reason for Issue: Supplier's contact details updated.

Replaces: Replaces version 1.0 dated 29 January 2022

References:

ECHA European Chemical Agency

NZ EPA Approved Hazardous Substances Databases.

Supplier Safety Data Sheets

Worksafe NZ Workplace Exposure Standards and Biological Exposure Indices

University of Hertfordshire Pesticides Properties Database

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.