

SAFETY DATA SHEET

TriBeet™

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **TriBeet™**
 Suspension concentrate containing phenmedipham 50 g/L, ethofumisate 50 g/L and metamitron 150 g/L

Other Name(s):

1.2 Recommended use of the chemical and restrictions on use

Product Use: Herbicide for use in fodder beet, red beet and sugar beet

1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited
 Address: 20 Jean Batten Drive Mt Maunganui, 3116
 Telephone: 0800 220 002
 Email: info@grosafe.co.nz

Emergency telephone number 0800 CHEMCALL (0800 243 622)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996
 HSNO Substance Approval: HSR101136
 Classifications: Acute inhalation toxicity Category 4; Specific target organ toxicity - repeated exposure Category 2; Hazardous to the aquatic environment chronic Category 2; Hazardous to soil organisms.

2.2 Label elements:

Pictograms:



Signal Word: WARNING

Hazard statements:

H332 Harmful if inhaled.
 H373 May cause damage to organs through prolonged or repeated exposure
 H411 Toxic to aquatic life with long lasting effects

Additional labelling statements required under Hazardous Substances (Labelling Notice 2017)

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Do not apply directly into or onto water.

**Precautionary statements:**

Prevention

P102	Keep out of reach of children.
P103	Read label before use.
P260	Avoid breathing mist/vapour/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in well-ventilated area.

Response

P101	If medical advice is needed, have product container or label at hand.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTRE or doctor if you feel unwell.
P391	Collect spillage.

Storage

Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion % w/w
Metamitron	41394-05-2	13.9
Phenmedipham	13684-63-4	4.6
Ethofumisate	26225-79-6	4.6
Other ingredients*	Trade secret	balance

This is a commercial product whose exact ratio of components may vary slightly.

*Do not affect the hazardous classifications of the product.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Information:

For advice call the National Poisons Centre, telephone 0800 POISON [0800 764 766].. Have product container or label at hand.

IF SWALLOWED: Rinse mouth. Get medical advice if you feel unwell.

IF ON SKIN: Remove contaminated clothing and wash skin with plenty of soap and water. Get medical advice if irritation occurs.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice if irritation persists.

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call the NATIONAL POISONS CENTRE or doctor for advice if you feel unwell.

4.2 Symptoms caused by exposure

Unlikely to cause harmful effects under normal conditions of handling and use.

4.3 Medical attention and special treatment

Treat symptomatically.



SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray or fog or foam as appropriate for surrounding materials. Contain extinguishing media to prevent runoff into drains, sewers, waterways.

5.2 Specific hazards arising from the chemical

Fire decomposition products may be toxic/harmful and/or irritating if inhaled.

Evacuate people to safe area upwind of fire.

5.3 Special protective equipment and precautions for fire fighters

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Have this SDS available. In the event of a spill, wear appropriate protective clothing, eye and skin protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material. For small liquid spills, use absorbent material and recover into labelled containers that can be sealed for safe disposal. For large liquid spills, recover liquid into labelled containers then absorb remaining liquid and transfer to labelled containers for disposal. Clean area with water and detergent.

If spillage of this product is near trees or valuable plants, remove the top 50mm of soil after the spillage is cleaned up. For further information contact the supplier for advice.

Dispose of contaminated materials to approved landfill in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use. Do not handle until all safety precautions have been read and understood.

Do not apply directly into or onto water.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Use only outdoors or in well ventilated area.

Avoid inhalation of mist/vapours/spray. Wear protective equipment such as coat/trouser (overalls), boots, gloves and eye protection. Do not eat, drink or smoke when using this product. Wash hands and exposed skin with soap and water after handling and before rest or meal breaks.

Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

7.2 Conditions for safe storage

Store in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area and out of direct sunlight. Keep away from food, drink and animal feedstuffs.

Storage of 1000L or more of this product requires an emergency response plan, secondary containment and signage.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m ³)	STEL (mg/m ³)
Propylene glycol	474 (vapour and particulates); 10 (particulates only) (150 ppm)	

8.2 Engineering controls

Use only outdoors or in a well-ventilated area..

8.3 Personal protective equipment (PPE)

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**.

Eye/Face Protection: Wear chemical splash goggles if eye contact is possible.

Skin Protection: Wear impervious chemical resistant gloves (e.g. nitrile, butyl), coveralls, socks and chemical resistant footwear. For overhead spray exposure, wear chemical resistant headgear. Ensure all skin areas are covered.

Respirator: Use outdoors in a well-ventilated area or use local exhaust ventilation. Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a cartridge, suitable for particulates.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White/cream liquid suspension
Odour	Aromatic
Odour threshold	Not known
pH	4.0 – 7.0 (as 1% aqueous)
Melting/Freezing Point	No data available
Boiling Point /Range	<100 °C
Flash point	Non flammable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	No data available
Vapour Pressure	No data available
Vapour density	No data available
Specific gravity	ca 1.08
Solubility	Forms emulsion in water
Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable
Particle characteristics	No data available



SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

10.3 Conditions to Avoid

Contact with oxidising agents.

10.4 Incompatible materials and possible hazardous reactions

Incompatible with explosives, oxidising agents, organic peroxides.

10.5 Hazardous decomposition products

Fire Decomposition: Carbon dioxide, carbon monoxide, smoke and other unspecified compounds.

10.6 Polymerisation

Not known to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

11.2 Toxicological information

Acute toxicity:	Classified as harmful if inhaled.
Aspiration hazard:	Product is not classified with aspiration hazard.
Respiratory irritation:	Not classified.
Skin corrosion/irritation	Not classified..
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitisation	Not classified.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity	Not classified
Reproductive toxicity	No ingredients in product identified as suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single/repeated exposure	May cause damage to organs through prolonged or repeated exposure at high doses.
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

11.3 Toxicological data:

Product	Not available
Metamitron	Oral, dog and mouse LD ₅₀ 650 mg/kg b.w Dermal, rat LD ₅₀ 1000 mg/kg b.w. Inhalation, mouse and hamster LC ₅₀ (4 hr) 0.206 mg/L
Phenmedipham	Oral, dog and guinea pig LD ₅₀ 4000 mg/kg b.w Dermal, rabbit LD ₅₀ 1000 mg/kg b.w.
Ethofumisate	Oral, rat LD ₅₀ >2000 mg/kg b.w Dermal, rat LD ₅₀ >2000 mg/kg b.w. Inhalation, rat LC ₅₀ (4 hr) > 0.16 mg/L



SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as being toxic to aquatic life with long lasting effects and hazardous to soil organisms.

12.2 Environmental Fate

Breakdown in soil and groundwater: Not rapidly biodegradable.

Metamitron DT₅₀ > 30 days

Phenmedipham DT₅₀ > 25 days

Ethofumisate DT₅₀ 10 – 122 days (laboratory); 84 -407 days (field)

Bioaccumulation: Not expected to bioaccumulate.

Metamitron BCF = 75

Phenmedipham BCF = 165

Ethofumisate BCF = 144

Partition coefficient (octanol/water): Not available.

Soil mobility: Low

12.3 Ecotoxicity data:

Metamitron	Fish; Oncorhynchus mykiss LC ₅₀ (96 hr) >190 mg/L Crustacea; Daphnia magna EC ₅₀ (48 hr) 5.7 mg/L Algae; Scenedemus subspicatus EC ₅₀ (72 hr) growth 0.22 mg/L Pseudokirchneriella subcapitata EC ₅₀ (72 hr) 0.4 mg/L Bird; Japanese quail LC ₅₀ 1875 -1930 mg/kg
Phenmedipham	Fish; Oncorhynchus mykiss LC ₅₀ (96 hr) 1.71 mg/L Crustacea; Daphnia magna EC ₅₀ (48 hr) 0.41 mg/L Algae: Selenastrum capricornutum EC ₅₀ (72 hr) 0.192 mg/L Bird: chicken LD50 >2500 mg/kg; mallard duck LD50 >2100 mg/kg
Ethofumisate	Fish; Cyprinus carpio LC ₅₀ (96 hr) 11.0 mg/L Crustacea; Daphnia magna EC ₅₀ (48 hr) 13.52 – 22.0 mg/L Bird: Mallard duck LD50 >3552 mg/kg; Bobwhite quail LD50 >8743 mg/kg

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Refer to product label. If possible, dispose of by using according to the label. Otherwise dispose of to a chemical recovery service or to an approved landfill in accordance with local regulations.

13.2 Container Disposal

Refer to product label. Do not use packaging for storage of other products. Empty packaging should be disposed of to an approved recycler or crushed and sent to approved landfill.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

**Air Transport (ICAO/IATA):**

Classified as Dangerous Good Class 9 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number:	3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS METAMITRON 15%, PHENMEDIPHAM 5%, ETHOFUMISATE 5%)
Transport hazard class(es)	9
Packing Group:	III
HAZCHEM:	3Z
Special Precautions for User:	-
IMDG Marine pollutant:	YES
Transport in Bulk:	-

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Substances (Hazard Classification) Notice 2020.

Approved substance number: HSR101136

Hazardous classifications: Acute inhalation toxicity Category 4; Specific target organ toxicity - repeated exposure Category 2; Hazardous to the aquatic environment chronic Category 2; Hazardous to soil organisms.

HSW (HS) Regulations 2017

Certified Handler Not required

Location Certificate Not required

Signage Trigger Quantity (Schedule 3) 1000 L

Emergency Response Plan (Schedule 5) 1000 L

Secondary Containment (Schedule 16) 1000 L

Tracking (Schedule 26) Not required

Controls:

Refer to control on www.epa.govt.nz for complete wording for variation to Controls.

77A The following limits are set for toxicologically relevant impurities in the active ingredient ethofumesate used to manufacture this substance: Ethyl methane sulfonate: 0.1 mg/kg maximum Isobutyl methane sulfonate: 0.1 mg/kg maximum.

77A This substance must be applied by ground-based methods only.

Do not apply onto or into water.

Record Keeping

If 3 kg or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. Refer HPC Section 48 (3) for record requirements.

Tolerable Exposure Level (TEL)

None set



Environmental Exposure Level (EEL)	None set
International Agreements	Not applicable
Additional information:	Refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)

15.2 ACVM Act 1997

Registration number: P9424 TriBeet™
Refer to www.foodsafety.govt.nz for registration conditions.

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

SDS issued	16 Oct 2023
SDS supersedes	26th June 2020
Reason issued	Update to GHS

16.2 ABBREVIATIONS

ADI	Acceptable Daily Intakes
CAS number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
ErC₅₀	Half maximal Effective Concentration
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
LC₅₀	Median Lethal Concentration
LD₅₀	Median Lethal Dose
SDS	Safety Data Sheets
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
SWA	Safety Work Australia
TWA	Time-Weighted Average
UN Number	United Nations Number

16.3 REFERENCES

EPA CCID and Approved Substance databases
PPDB- Pesticides Properties DataBase

16.4 OTHER

TriBeet™ is a trademark of Grosafe Chemicals Ltd

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16 Oct 2023



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End of Safety Data Sheet