



Grosafe CHEMICALS LTD.

SAFETY DATA SHEET

QuadBeet™

SECTION 1: Identification of the substance and supplier

Product name: QuadBeet™
Recommended Use: Herbicide, for use in fodder beet, red beet and sugar beet

Company: Grosafe Chemicals Ltd.
Address: 20 Jean Batten Drive, Mt Maunganui 3116 (P.O. Box 14450 Tauranga 3143)
Email: enquiries@Grosafechemicals.co.nz
Telephone Toll Free Number:
Emergency Telephone Number: 0800 CHEMCALL (0800 243622)
(EMERGENCIES ONLY)

Date of Issue: August 2017

SECTION 2: Hazards Identification

HSNO Hazard Classification: 6.1D, (metamitron) harmful if inhaled or swallowed, 6.3B, skin irritant, 6.4 A, eye irritant, 6.5B (desmedipham), May cause sensitisation from prolonged skin contact, 6.7B suspected of causing cancer, 6.9B, may cause organ damage from repeated oral exposure at high doses, 9.1A, very toxic to aquatic organisms, 9.2A, very toxic to soil organisms, 9.3C harmful to terrestrial vertebrates.

SECTION 3: Composition/information on hazardous ingredients

<u>Ingredients</u>	<u>CAS Number</u>	<u>Content</u>
phenmedipham	13684-63-4	60 g/l
desmedipham	13684-56-5	60 g/l
ethofumisate	26225-79-6	60 g/l
metamitron	41394-05-2	200 g/l

SECTION 4: First Aid Measures

In case of poisoning by any route contact a doctor or Poisons Information Centre.

Swallowed: If large quantities are ingested, drink plenty of water. Do not induce vomiting. Immediately contact a doctor or Poisons Information Centre.

Eye: Flush eyes with large quantities of water for 15 minutes. Seek medical advice.

Skin: If contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water. Consult a doctor if irritation persists.

Inhaled: Move affected person to fresh air and keep at rest until recovered.

Advice to Doctor: Treat symptomatically. In the event of a mouthful or more being ingested, the following measures should be considered: gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Forced alkaline diuresis and haemodialysis may be considered.

Carefully monitor the kidney functions. Carefully monitor the respiratory functions. Contact Poisons Information Centre (0800 POISON (0800 764 766) for more information.

SECTION 5: Fire Fighting Measures

Extinguishing media:	Fine water spray or foam.
Special exposure hazards:	None
Fire and Explosive Properties:	May form hazardous decomposition products
Flammability:	Non-flammable. Flashpoint > 100 °C.
HAZCHEM:	2Z

SECTION 6: Accidental Release Measures

In Case of Spill or Leak: Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with water plus detergent. Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

SECTION 7: Handling and Storage

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store with food or drink. Wash thoroughly with soap and water after handling.

SECTION 8: Exposure Control/Personal Protection

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND STORAGE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco use and cosmetic application in areas where there is a potential for exposure to the material, Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits.

Occupational exposure limit values: No TEL values have been set for this product.

Workspace Exposure Standards WES values as set by WorkSafe New Zealand for the following components:

	TWA	STEL
Acetone	500ppm / 1185mg/m ³	1000ppm / 2375mg/m ³
Propylene glycol	150ppm / 474mg/m ³	-

SECTION 9: Physical and Chemical Properties

Appearance:	White/ cream liquid
Odour:	Aromatic
pH:	4.0 – 7.0
Boiling Point:	<100 °C.
Flammable (Explosive) Limits:	Non flammable
Explosive Properties:	Not explosive
Oxidizing Properties:	Not an oxidizing agent
Vapour Pressure:	Not determined
Solubility:	Readily dispersible in water

SECTION 10: Stability and Reactivity

Stability:	Stable
Conditions to avoid:	None
Materials to avoid:	Oxidising materials
Hazardous Decomposition Products:	May be formed at high temperatures
Hazardous Polymerisation:	Will not occur

SECTION 11: Toxicological Information

Acute toxicity

Acute oral LD ₅₀ (mouse/ rat) :	>5,000mg/kg (ethofumisate)
Acute oral LD ₅₀ for mice:	>5,000 mg/kg (desmedipham)
Acute oral LD ₅₀ (rat) :	2,000mg/kg (metamitron)
Acute oral LD ₅₀ (mouse/ rat) :	>8,000mg/kg (phenmedipham)
Inhalation	
LC ₅₀ (4h) (mouse/ hamster) :	0.206 mg/L (metamitron)
LC ₅₀ (4h) for rats:	>7.4 mg/L (desmedipham)
LC ₅₀ (4h) (rat) :	> 3.97 mg/L (ethofumisate)
LC ₅₀ (4h) (rat) :	> 7.0 mg/L (phenmedipham)
Dermal	
Acute dermal LD ₅₀ (rat) :	2,000mg/kg (ethofumisate)
Acute dermal LD ₅₀ for rabbits:	>4,000 mg/kg (desmedipham)
Acute dermal LD ₅₀ (rat) :	1,000mg/kg (metamitron)
Acute dermal LD ₅₀ (rat) :	2,500mg/kg (phenmedipham)

Skin Sensitisation: Not a sensitizer

Chronic toxicity

Mutagenicity:	Not expected
Reproductive Toxicity:	Not expected
Carcinogenicity:	Suspected

Presumed to cause organ damage from repeated oral exposure at high doses (6.9B).

SECTION 12: Environmental Information

Ecotoxicity

Acute Toxicity - Fish LC₅₀ (96h) for rainbow trout and bluegill sunfish; 12 21 mg/L. (ethofumisate)
Acute Toxicity - Fish LC₅₀(96h) for rainbow trout 1.7, bluegill sunfish 3.2 mg/L (desmedipham)
Acute Toxicity - Fish LC₅₀ (96h) for Golden Orfe 443 mg/L. (metamitron)
Acute Toxicity - Fish LC₅₀ (96h) for rainbow trout 1.4 – 3.0 mg/L. (phenmedipham)
Acute Toxicity - Daphnia: LC₅₀ (48h) = 14-22 mg/L (ethofumisate)
Acute Toxicity - Daphnia: LC₅₀ (48h) = 107-206 mg/L (metamitron)
Acute Toxicity - Daphnia: LC₅₀ (72h) = 3.8 mg/L (phenmedipham)
Acute Toxicity - Daphnia LC₅₀ (48 h): 1.88 mg/L (desmedipham)
Acute Toxicity - Green alga: EC₅₀ (48h) = 3.9 mg/L (ethofumisate)
Acute Toxicity - Green alga: EC₅₀ (48h) = 0.22 mg/L (metamitron)
Acute Toxicity - Green alga: EC₅₀ (72h) = 0.13 mg/L (phenmedipham)
Acute Toxicity - Green alga: Algae LC₅₀ (72h) 0.061 mg/L (desmedipham)

Toxicity to Birds:

Desmedipham

LC₅₀ (14d) for bobwhite quail and mallard ducks >2000mg/kg
Dietary LC₅₀ (8d) for bobwhite quail and mallard ducks >5000mg/kg

Ethofumesate

Phenmedipham

LD₅₀ for mallard ducks >3552, bob white quail >8743mg/kg.
Dietary LC₅₀ (8d) for mallard ducks >1082, bobwhite quail >839 mg/kg b.w. daily

Metamitron

LD₅₀ for Japanese quail 1875-1930 mg/L

Phenmedipham

LD₅₀ for chickens >2500, mallard ducks >2100mg/kg.
Dietary LC₅₀ (8d) for mallard ducks and bobwhite quail >6500 mg/kg diet

Environmental fate: ethofumisate; DT₅₀: 10-122 days (lab.), 84-407 days (field)
metamitron; DT₅₀: > 30 days (soil)
phenmedipham; DT₅₀: > 25 days
desmedipham: DT₅₀ in soil c. 34d, DT₉₀ <115d.

SECTION 13: Disposal Considerations

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to regional or local body bylaws.

Triple rinse the empty container, adding the rinsate to the spray tank. Recycle if possible, otherwise crush and bury in an approved local authority facility. Avoid contamination of any water supply with product or empty container. Do not use container for any other purpose.

SECTION 14: Transport Information

Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID (phenmedipham, ethofumisate, metamitron, desmedipham)

UN Number: 3082

Class: 9

Marine pollutant: yes

Packing Group: III

HAZCHEM: 2 Z

Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information.
Sea transport may require additional segregation, Refer NZS5433 for details.

SECTION 15: Regulatory Information

QuadBeet is a registered product under the ACVM Act 1997 (P9423).
See www.foodsafety.govt.nz for registration conditions.

QuadBeet is approved under the HSNO Act 1996 (HSR101145).
See www.epa.govt.nz for approval conditions

Note: The information contained herein is given in good faith, but no warranty, expressed or implied, is made.
Consult Grosafe Chemicals Ltd. for further information.