1: Identification of the Substance and Supplier

Product Name Recommended Use Suppliers Details

Web Address **Email Address Telephone Number Emergency Telephone National Poison Centre** Date of Issue/Revision

BEETRON PM

BEETKON
Herbicide
Orion AgriScience Ltd
Unit 1, 15 Sir Gil Simpson Drive, Harewood, Christchurch, 8053
PO Box 39 071, Harewood, Christchurch, 8545
www.orionagriscience.co.nz
orders@orionagriscience.co.nz
(03) 928 2386 (office hours), 0800 674 6627 (free phone)
0800 CHEMCALL (0800 243 622) (24 hours)
0800 POISON (0800 764 766) (24 hours)
Jan 2025

2: Hazards Identification

Hazard Pictograms

Signal Words

Hazard Classes:



Warning

Hazard Statements:

Specific target organ toxicity (repeated exposure) Category 2	H373 May cause damage to organs through prolonged or repeated exposure
Hazardous to the aquatic environment acute Category 1	H400 Very toxic to aquatic life
Hazardous to the aquatic environment chronic Category 1	H410 Very toxic to aquatic life with long lasting effects
Hazardous to soil organisms	H421 Very toxic to the soil environment
Hazardous to terrestrial vertebrates	H433 Harmful to terrestrial vertebrates
Precautionary Statements:	
Prevention	P102 Keep out of reach of children
	P103 Read carefully and follow all instructions
	P260 Do not breathe dust/fume/gas/mist/vapours/spray
	P273 Avoid release to the environment
	Avoid contact with eyes and skin. Take all reasonable steps to ensure that this
	product does not cause any significant adverse effects to the environment beyond
	the application area. Do not apply directly into or onto water.
Response	P314 Get medical advice/attention if you feel unwell
	P391 Collect spillage
	In an emergency call 111, Police or Fire Brigade. For specialist advice in an
	emergency only, call 0800 CHEMCALL (0800 243 6225) (24 hrs).
Storage	
Disposal	P501 Dispose of contents by using it in accordance with this label. Dispose of the
	container via AgRecovery after triple rinsing (use the rinsate for spraying).

3: Composition/ Information on Ingredients		
Ingredient	CAS No	Content (% w/v)
Phenmedipham (active ingredient)	13684-63-4	10
Metamitron (active ingredient)	41394-05-2	30
Other ingredients	Proprietary	Remainder

4: First Aid Measures

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor

Ingestion:	Seek medical advice	
Skin Contact:	Wash with plenty of soap and water. Seek medical advice if irritation occurs	
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing.	
	Seek medical advice if irritation persists.	
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice if feeling	
	unwell.	
Workplace Facilities:	Hand wash facility. Eye wash facility	
Advice to Doctor:	No specific antidote. Treat symptomatically	
National Poison Centre	0800 POISON (0800 764 766) (24 hours)	
Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:		
Ingestion:	No data available	
Skin Contact:	May cause mild irritation	
Chronic:	May cause damage to organs through repeat or prolonged exposure	
Inhalation:	No data available	

5: Fire-Fighting Measures	
Fire/Explosion Hazard	Non-Flammable
HAZCHEM Code	3Z
ERP Guide No	47
Extinguishing Media	Water spray, foam, dry chemical or C02. Avoid water jet.
Fire Fighting Instructions	Wear full personal protective equipment including self-contained breathing apparatus
Specific Hazards Arising from Fire	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff

6: Accidental Release Measures		
Personal Precautions	Wear personal protective clothing and equipment as described in section 8. Exclude non-essential people	
	from the area.	
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.	
Clean Up	Absorb spillage with inert material such as spill kit, sand or cat litter. Collect and place in a sealable	
	container for disposal. Wash down affected area with water and detergent. Absorb and collect washings for	
	disposal. Dispose of safely to a suitable landfill.	

7: Handling and Storage	
Storage:	Keep out of reach of children.
Handling and Use:	Refer to Prevention statements in section 2 above. Exclude people and animals from the application area,
	both during application and for the duration of the REI.
REI	24 h

8: Exposure Controls / Personal Protection		
Tolerable Exposure Limit	None established	
Workplace Exposure Standards	None established	
Engineering Controls	Select spray application equipment to minimize exposure to operator and bystanders	
Personal Protection:		
Eye	Safety glasses/goggles when mixing or applying	
Skin	Overalls snugly fitting at the neck, wrist and ankle, boots and waterproof gloves	

Respiratory

Not required where spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate matter) is required.

Clean protective equipment after use

9: Physical and Chemical Properties

Appearance	Off White Opaque Liquid
Odour	Slight
Odour Threshold	Does not apply
рН	4.0 - 9.0 (1% dispersion)
Melting Point/Freezing Point	<0°C
Boiling Point	>100°C
Flash Point	Does not apply
Flammability	Does not apply
Upper/Lower Flammability Limits	Does not apply
Vapour Pressure	Does not apply
Vapour Density	Does not apply
Relative Density	1.08 g/mL (approx.)
Solubility in Water	Dispersible
Partition Coefficient: n-octanol/water	See section 12
Auto ignition Temperature	Does not apply
Decomposition Temperature	Does not apply
Kinematic Viscosity	Does not apply
Particle characteristics	Does not apply

10: Stability and Reactivity Stability Stability

Stability	Stable under normal conc
Hazardous Reactions	None Expected
Incompatibility	None Known
Hazardous Decomposition Products	None Known

11: Toxicological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

Acute Oral Toxicity	LD50 > 2000 mg/kg	
Acute Dermal Toxicity	LD50 > 5000 mg/kg	
Acute Inhalation Toxicity	LD50 > 5 mg/L	
Skin corrosion/irritation	Information not available	
Serious eye damage/Eye irritation	Information not available	
Respiratory or skin sensitisation	Information not available	
Germ cell mutagenicity	None Information not available	
Carcinogenicity	Information not available	
Reproductive Toxicity	Information not available	
Specific Organ Toxicity – Single exposure	Information not available	
Specific Organ Toxicity – Repeated exposure	d exposure May cause organ damage from repeated ingestion at high doses	
Aspiration hazard	Information not available	

12: Ecological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

The following information is presented in respect of the active ingredient:

Ecotoxicity

Phenmedipham

	Acute Oral LD50 (Japanese quail) 1302 mg/kg	
	• LC50 (96 hr) (Rainbow trout) >190 mg/l	
	• EC50 (48 hr) (Daphnia) 5.7 mg/l	
	• LC50 (72 hr) (Algae) 0.4 mg/l	
	• Non - toxic to bees	
	Metamitron	
	Acute Oral LD50 (Bobwhite quail) >2000 mg/kg	
	LC50 (96 hr) (Rainbow trout) 1.7 mg/l	
	• EC50 (48 hr) (Daphnia) 0.41 mg/l	
	• LC50 (96 hr) (Algae) 0.09 mg/l	
	Non - toxic to bees	
Persistence/degradability	Biodegradable. DT50 (soil) 12 days (typical) (Phenmedipham)	
	Biodegradable. DT50 (soil) 30 days (typical) (Metamitron)	
Bioaccumulative Potential	Octanol-water partition coefficient	LogP = 2.7 (moderate) (Phenmedipham)
		LogP = 0.85 (low) (Metamitron)
Soil Mobility	Soil organic carbon water partitioning coefficient	Koc = 1775 (slightly-mobile) (Phenmedipham)
		Koc = 77.7 (moderate mobile) (Metamitron)
Environmental Exposure Limit:	None established	

13: Disposal Considerations	
Product	Dispose of product by using it in accordance with the label. Waste product should be disposed of to a
	suitable landfill. For disposal of large quantities contact Orion AgriScience Ltd.
Container	Dispose of to a suitable landfill or via AgRecovery. Do not burn. Do not use packaging for any other
	purpose.

14: Transport Information	
Dangerous Goods	
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (METAMITRON 30%, PHENMEDIPHAM
	10%)
Class	9
Subsidiary Class	None
Packing Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	1000 litres
Passenger Service Vehicle	No restriction

EPA Approval NoHSR101235ACVM Registration NoP9463Qualified Person Certified HandlerRequiredNot requiredNot required
Qualified Person Required Certified Handler Not required
Certified Handler Not required
Workplace Only No
Tracking Not required
Record Keeping Not required (unless > 3 L applied within 24 hours, and which is likely to leave the application area)
Site Requirements under EPA Notice • A hazardous substance location compliance certificate is not required
and HSWHS Regs: • A hazardous area is not required

	Fire extinguishers are not required
	Signage is required for more than 100 litres
	An emergency response plan is required for more than 100 litres
	Secondary containment is required for more than 100 litres
	Segregation from incompatible substances class 1
Application Rates	Maximum application rate 3L/ha. Maximum application frequency 4 times per season. Must not be applied
	to the same area more than 4 times per season. Must not be applied to the same area at rates exceeding
	7.5 L/ha per season
Application Methods	Must be applied using ground-based methods only
Additional Requirements	Refer to NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans

16: Other Information	
SDS review date	14 January 2025
Glossary	
ADE	Acceptable Daily Exposure – A daily dose, received via any route, below which no adverse effects are
	expected over a lifetime of exposure
ACVM	Agricultural Compounds and Veterinary Medicines group of the Ministry of Primary Industries
Cat.	GHS category
Ceiling	A concentration that should not be exceeded at any time during any part of the working day
Certified Handler	A qualification issued by a Compliance Certifier to handle and use particularly toxic substances (6.1A and
	6.1B)
DT50	Time (days) for 50% reduction in concentration
EC50	Concentration required to produce an effect in 50% of organisms
Environmental Exposure Limit	Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.
EPA Notice	Hazardous Property Controls Notice 2017
ERP Guide	Dangerous Goods – Initial Emergency Response Guide SNZ HB 76:2008
GHS	Globally harmonized system of classification and labelling of chemicals
Hazardous Substance Location	For locations storing hazard substances of certain classes above threshold quantities
Compliance Certificate	
Hazardous Area	A designated area designed for the presence of flammable substances - Refer AS/NZS 60079.10.1:2009
HAZCHEM Code	Emergency action code for emergency services
HSWHS Regs	Health and Safety at Work (Hazardous Substances) Regulations 2017
LC50	Concentration that will kill 50% of organisms
LD50	Dose that will kill 50% or organisms
MTQ	Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road
	by the user
Notification	Advance notice given to neighbours and other affected parties, of details of proposed application, and
	other details as described
Octanol-Water Partition Coefficient	The partition coefficient of a substance between n-octanol and water, used as the Logarithm base 10
	form, as an indicator that a substance may bioaccumulate
Protected Place	Residential properties, schools, hospitals, kindys, factories, shops, warehouses, etc., and other places where
	people assemble
Public Place	A place frequented by the public, including roads (does not include private property)
Qualified Person	A requirement for the loader, contractor or person applying the product to hold a qualification such as a
	GROWSAFE Certificate, Unit Standard 21563, etc.
Record Keeping	Includes a spray diary or other record of application

REI	Restricted Entry Interval – The length of time after application before entry into the treated area is
	permitted without the use of protective equipment. For indoor environments, this time period commences
	once ventilation after treatment begins.
Segregation	Certain classes of substances must not be in contact with, and must be stored separately from, certain
	other classes as specified in HSWHS Regs
Separation Distances	The distances specified in Part 11 and Part 13 of HSWHS Regs between storage and/or use of hazardous
	substances and protected places and/or public places
Signage	Positioned at entrances to commercial premises providing information on the hazardous substances
	present
Soil Adsorption Coefficient (Kd)	The ratio of the concentrations of a substance adsorbed onto a solid sorbent to that dissolved in a liquid
	phase. The higher the value the less mobile the chemical is in soil
Soil Organic Carbon-Water	The ratio of the mass of a chemical that is adsorbed in the soil per unit mass of organic carbon in the soil.
Partitioning Coefficient (Koc)	The higher the value the less mobile the chemical is in soil
STEL	Short term exposure level – 15 minute time weighted average
Tolerable Exposure Limit	Maximum concentration limit of a substance above which persons must not be exposed
Tracking	For some particularly hazardous substances, a record must be kept of the transport, storage, sale and use
	of the product
TWA	Time weighted average calculated over an 8 hour working day
Workplace Exposure Standard	An occupational health standard limiting concentrations of specified substances to which persons are
	exposed
Workplace Only	A product that is restricted to a workplace only and under the supervision of a certified handler
Please Note	

Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise themselves with the product label and Safety Data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion AgriScience Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.