



Safety Data Sheet
Magnesium sulphate 20%

1. IDENTIFICATION OF SUBSTANCE & COMPANY

Product information

Product name Magnesium sulphate 20%
Other names NA
ACVM approval A001448
HSNO approval non hazardous
Approval description NA
UN number NA
Proper Shipping Name NA
Packaging group NA
Hazchem code 1T (recommended)

Uses For the treatment of grass staggers in cattle.

Company Details

Company Bayer New Zealand Ltd
Address 3 Argus Place,
Hillcrest,
Auckland 0627
New Zealand.
Telephone 0800 652 488
Facsimile 0800 229 838

Emergency Telephone Number: 0800 734 607

2. HAZARD IDENTIFICATION

Approval

This product is considered non hazardous under the Hazardous Substances and New Organisms Act (HSNO):

Classes **Hazard Statements**

none

SYMBOLS

none

Other Classifications

ACVM registration number:
A001448

There are no other classifications that are known to apply.

Precautionary Statements

none

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS/ Identification	Concentration
Magnesium Sulphate	10034-99-8	200g/L
Preservative	Proprietary	<1%
Water	7732-18-5	balance

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.



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4. FIRST AID

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product.

Recommended first aid facilities Ready access to running water is recommended.

Exposure

Swallowed
Eye contact

Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Skin contact
Inhaled

This product is non-irritating to skin. No further measures should be required.
Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically.

5. FIREFIGHTING MEASURES

Fire and explosion hazards: There are no specific risks for fire/explosion for this chemical.

Suitable extinguishing substances: Carbon dioxide, extinguishing powder, foam, fog sprays, water spray.

Unsuitable extinguishing substances: Use standard firefighting procedures and consider the hazards of other involved materials. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Products of combustion: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Hazchem code: 1T (recommended)

6. ACCIDENTAL RELEASE MEASURES

Containment The is no current legal requirement for secondary containment of this product. Emergency plans to manage any potential spill must be in place. Prevent spillage from spreading or entering soil, waterways or drains.

Emergency procedures If a significant spill occurs:
Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).

Clean-up method Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard.

Disposal Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.

Precautions No special protective clothing is normally necessary.



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7. STORAGE & HANDLING

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by the NZ Department of Labour for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (OSH – DoL 2011)	Ingredient	WES-TWA	WES-STEL
	No ingredient listed		

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear if splashes are likely.
Skin	Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period of time.
Respiratory	A respirator when airborne concentrations approach the WES (section 8). Use a particulate filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	clear colourless liquid
Odour	no odour
pH	neutral
Vapour pressure	no data
Viscosity	no data
Boiling point	no data
Volatile materials	no data
Freezing / melting point	no data
Solubility	soluble in water
Specific gravity / density	~1g/cm ³
Flash point	non flammable
Danger of explosion	not explosive
Auto-ignition temperature	no data
Upper & lower flammable limits	no data
Corrosiveness	non corrosive



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10. STABILITY & REACTIVITY

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	None known
Substance Specific Incompatibility	None known
Hazardous decomposition products	None known
Hazardous reactions	None known

11. TOXICOLOGICAL INFORMATION

Summary

IF SWALLOWED: Will not cause harm.

IF IN EYES: Not irritating.

IF ON SKIN: Not irritating.

IF INHALED: Not irritating.

Supporting Data

Acute	Oral	No evidence of acute toxicity.
	Dermal	No evidence of dermal toxicity.
Chronic	Inhaled	No evidence of inhalation toxicity.
	Eye	The mixture is not considered to be an eye irritant under HSNO.
	Skin	The mixture is not considered to be a skin irritant under HSNO.
	Sensitisation	EPA have not classed this as a sensitiser. No ingredient present >0.1% is classed as a sensitiser.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	No ingredient present at concentrations > 1% is considered a target organ toxicant.
	Aggravation of existing conditions	None known.

12. ECOLOGICAL DATA

Summary

This mixture is not considered to be ecotoxic.

Supporting Data

Aquatic	No evidence of ecotoxicity in the aquatic environment.
Bioaccumulation	Not expected to bioaccumulate.
Degradability	Biodegradable.
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	Not harmful towards terrestrial vertebrates.
Terrestrial invertebrate	Not harmful towards terrestrial invertebrates.
Environmental effect levels	No EELs are available for this mixture or ingredients



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13. DISPOSAL CONSIDERATIONS

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. TRANSPORT INFORMATION

There are no specific restrictions for this product (not a dangerous good).

UN number:	NA	Proper shipping name:	NA
Class(es):	NA	Packing group:	NA
Precautions:	NA	Hazchem code:	1T (recommended)

15. REGULATORY INFORMATION

This product is not considered hazardous under the Hazardous Substances and New Organisms Act (HSNO).

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

No workplace controls apply to this product (non hazardous).

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.
ACVM registration number: A001448



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16. OTHER INFORMATION

Abbreviations

Approval Code	Not applicable – non hazardous under HSNO. Controls, EPA. www.epa.govt.nz
ACVM	Agricultural Compounds and Veterinary Medicines
ARTG	Australian Register of Therapeutic Goods
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority (now EPA)
EPA	Environmental Protection Agency (previously known as ERMA)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS	Material Safety Data Sheet (or Safety Data Sheet)
OSH - DoL	The Occupational Safety and Health Service of the Department of Labour (NZ)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html for specific chemicals.
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2011	The NZ Workplace Exposure Standards Effective from 2011, published by OSH – DoL and available on their web site – www.osh.dol.govt.nz .
Other References:	Suppliers MSDS

Review

Date	Reason for review
October 2012	Not applicable – new MSDS

Disclaimer

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This MSDS is copyright Datachem and must not be edited without the permission of the copyright holder or used for other than intended purpose. To contact the MSDS author, email info@datachem.co.nz or phone: (09) 940 30 80.

