



Magnesium sulphate

Safety Data Sheet

1. Identification of Substance & Company

Product

| | |
|-----------------------------|--------------------------------|
| Product name | Magnesium sulphate |
| HSNO approval | Not applicable – non hazardous |
| Approval description | Non hazardous |
| UN number | NA |
| DG class | NA |
| Proper Shipping Name | NA |
| Packaging group | NA |
| Hazchem code | NA |
| Uses | Fertiliser |

Company Details

| | |
|------------------|--|
| Company | EGMONT COMMERCIAL |
| Address | PO Box 37-326 Christchurch 8245 New Zealand |
| Website | www.egmontcommercial.co.nz |
| Telephone | Auckland (09) 838 2960 Christchurch (03) 349 5546 |
| Email | sales@egmontnz.com |

2. Hazard Identification

Approval

This product is not considered hazardous under the Hazardous Substances and New Organisms Act (HSNO) and GHS 7, according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020.

GHS 7 Classes

none

Hazard Statements

SYMBOLS

None

Other Classifications

There are no other classifications that are known to apply.

Precautionary Statements

none

3. Composition / Information on Ingredients

| Component | CAS/ Identification | Conc (%) |
|--------------------|---------------------|----------|
| Magnesium sulphate | 10034-99-8 | 100% |

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

4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

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



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Exposure

| | |
|---------------------|---|
| Swallowed | Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if experiencing any symptoms. |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice. |
| Skin contact | This product is non-irritating to skin. No further measures should be required. |
| Inhaled | IF INHALED: Dusts may cause irritation. If experiencing irritation, remove to fresh air. Drink water to clear throat. If shortness of breath or wheezing develops, seek medical attention. Call a POISON CENTER or doctor/physician if you feel unwell. |

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

| | |
|---|--|
| Fire and explosion hazards: | There are no specific risks for fire/explosion for this chemical. It is non-flammable. |
| Suitable extinguishing substances: | Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam. |
| Unsuitable extinguishing substances: | Unknown. |
| Products of combustion: | Sulphur oxides, magnesium oxides. 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. Safety boots, non-flammable overalls, gloves, hat and eye protection. |
| Hazchem code: | NA |

6. Accidental Release Measures

| | |
|-----------------------------|--|
| Containment | Not required. |
| Emergency procedures | This product is not considered flammable or ecotoxic. The container size will general prevent a major spill. If a large spill (e.g. >100kg) does occur: Wear protective equipment to prevent skin, eye and respiratory exposure to dusts. Clear area of any unprotected personnel. Avoid creating dust. If appropriate, use a gentle water spray to wet material to minimise dust generation. |
| Clean-up method | If possible to wet the dust, wet and sweep up the solid. Dry sweeping should not be attempted. Vacuuming with an industrial vacuum outfitted with a high efficiency particulate filter is recommended. |
| Disposal | Collect recoverable material into labelled containers for recycling or salvage. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. See section 14. |
| Precautions | Wear protective equipment to prevent eye contamination and the inhalation of dusts. Work up wind or increase ventilation. |

7. Storage & Handling

| | |
|-----------------|--|
| Storage | Avoid storage near food and beverages. |
| Handling | Avoid contact with incompatible substances as listed in Section 10. Store in a dry place. Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of dusts. |

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

| NZ Workplace Exposure Std | Ingredient | WES-TWA | WES-STEL |
|---------------------------|--------------------|------------------|------------------|
| | Magnesium sulphate | data unavailable | data unavailable |



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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 at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. 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 | Avoid contact with eyes. Use safety glasses or goggles if irritant levels of dusts are present. |
| Skin | Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves if concerned about irritation or dryness of the skin. |
| Respiratory | A respirator when airborne concentrations approach the WES (section 8). Use a respirator with a dust 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 | white powder |
| Odour | odourless |
| Odour threshold | no data |
| pH | 6-8 |
| Freezing / melting point | no data |
| Boiling point | no data |
| Flash point | no data |
| Flammability | no data |
| Upper & lower flammable limits | no data |
| Vapour pressure | no data |
| Vapour density | no data |
| Specific gravity / density | no data |
| Solubility | soluble in water |
| Partition Coefficient: | no data |
| Auto-ignition temperature | not self-igniting |
| Decomposition temperature | no data |
| Viscosity | no data |
| Particle characteristics | no data |

10. Stability & Reactivity

| | |
|---|---|
| Stability | Stable |
| Conditions to be avoided | Containers should be kept closed in order to avoid contamination. Avoid creation of dust during handling. |
| Incompatible groups | none known |
| Substance Specific Incompatibility | Acids, strong oxidising agents. |
| Hazardous decomposition products | Fire or heat will produce irritating and/or toxic fumes, including oxides sulphur, magnesium oxide. |
| Hazardous reactions | none known |

11. Toxicological Information

Summary

IF SWALLOWED: No adverse effects expected.

IF IN EYES: Dust may be irritating to eyes.

IF ON SKIN: This product is not absorbed through the skin. Mixture may dry out the skin.

IF INHALED: Dusts may cause upper respiratory tract irritation, resulting in coughing and sneezing.

CHRONIC EFFECTS: Long term exposure to high levels of fine nuisance dust may cause injury to lungs and the respiratory system.



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Supporting Data

| | | |
|----------------|--|--|
| Acute | Oral | Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >5,000 mg/kg. |
| | Dermal | No evidence of dermal toxicity. |
| | Inhaled | The substance is not considered acutely toxic if inhaled, however there may be irritation of the respiratory tract if dust is inhaled. |
| | Eye | The mixture is not considered to be an eye irritant. |
| | Skin | The mixture is not considered to be a skin irritant. |
| Chronic | Sensitisation | No ingredient present at concentrations > 0.1% is considered a sensitizer. |
| | Mutagenicity | No ingredient present at concentrations > 0.1% is considered a mutagen. |
| | Carcinogenicity | No ingredient >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 Aggravation of existing conditions | No ingredient present >1% is considered a systemic toxicant. |

12. Ecological Data

Summary

This product is not considered ecotoxic.

Supporting Data

| | |
|------------------------------------|---|
| Aquatic | These products are not considered to be toxic in the aqueous environment. |
| Bioaccumulation | No data |
| Degradability | No data |
| Soil | These products are not considered to be toxic in the soil environment. |
| Terrestrial vertebrate | These products are not considered ecotoxic towards terrestrial vertebrates. |
| Terrestrial invertebrate | No evidence of toxicity towards terrestrial invertebrates. |
| Biocidal | no data |
| Environmental effect levels | No EELs are available for this mixture or ingredients |

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 | Preferably re-cycle container, otherwise send to landfill or similar. |

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

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: | NA |

IMDG

| | | | |
|---------------------|----|------------------------------|----|
| UN number: | NA | Proper shipping name: | NA |
| Class(es) | NA | Packing group: | NA |
| Precautions: | NA | EmS | NA |

IATA

| | | | |
|---------------------|----|------------------------------|----|
| UN number: | NA | Proper shipping name: | NA |
| Class(es) | NA | Packing group: | NA |
| Precautions: | NA | ERG Guide | NA |



15. Regulatory Information

This product has been assessed as non hazardous under the Hazardous Substances and New Organisms Act (HSNO).

Specific Controls

Key requirements are:

| | |
|---------------------------------|---|
| SDS | Not required (non hazardous), but best practice to have the SDS available. |
| Inventory | An inventory of all hazardous substances must be prepared and maintained. |
| Packaging | All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied |
| Labelling | Must comply with the Hazardous Substances (Labelling) Notice 2017. |
| Emergency plan | Not required. |
| Certified handler | Not required. |
| Tracking | Not required. |
| Bunding & secondary containment | Not required. |
| Signage | Not required. |
| Location compliance certificate | Not required. |
| Flammable zone | Not required. |
| Fire extinguisher | Not required. |

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

| | |
|------------------------|--|
| CAS Number | Unique Chemical Abstracts Service Registry Number |
| CAS Number | Unique Chemical Abstracts Service Registry Number |
| EC₅₀ | Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species) |
| EPA | Environmental Protection Authority (New Zealand) |
| GHS | Globally Harmonised System of Classification and Labelling of Chemicals, 7 th revised edition, 2017, published by the United Nations. |
| 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) |
| NZIoC | New Zealand Inventory of Chemicals |
| 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 |
| STOT RE | System Target Organ Toxicity – Repeated Exposure |
| STOT SE | System Target Organ Toxicity – Single Exposure |
| 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 during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone. |



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References

| | |
|--------------------------|---|
| Data | Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID). |
| Controls | EPA notices, www.epa.govt.nz , Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz |
| WES | The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz . |
| Other References: | EU ECHA, ingredients SDS's, ChemIDplus |

Review

| Date | Reason for review |
|--------------|--------------------------|
| January 2020 | Not applicable – new SDS |
| August 2025 | update |

Expiry date

25 August 2030

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS 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 SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS 7 classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 21 1040951.

