



MAGPOWER®
POWERAG™

SAFETY DATA SHEET

according to 29 CFR 1910.1200

Revision Date: 01.10.2024

Version: 1.0/EN (USA)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Mixture

Mixture name: MagPower®

Other means of identification: Not applicable

Hazard components for labeling: Magnesium Nitrate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant Identified uses: Liquid Magnesium for foliar application

Uses advised against: Not for consumption

1.3. Details of the supplier of the safety data sheet

PowerAG

2213 Leabrook Road, Lancaster PA 17601

1-800-842-2578 powerag.com

1.4. Emergency telephone number

Emergency number: 1-800-424-9300 ChemTrec

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance

Classification according to 29 CFR 1910.1200

Skin Irritation 2

Eye Irritation 2

Specific target organ toxicity (single exposure) 3

Classification procedure

Based on concentration threshold

Based on concentration threshold

Based on concentration threshold

Additional information: None known

2.2. Label elements

Labeling according to 29 CFR 1910.1200

Hazard pictograms:



Signal word: Warning

Hazard statements: Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements: Avoid breathing vapor. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing and eye protection. Wash face, hands and skin thoroughly after handling. Take off contaminated clothing and wash before reuse. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. Store locked up in a well-ventilated place. Keep container tightly closed. Dispose of container in accordance with regulations.

Supplemental hazard information: None

Special rules for supplemental label elements for certain mixtures: Not applicable

Additional labeling: Keep out of the reach of children.

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Description of mixture: Liquid blend of magnesium compounds



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Hazardous ingredients:

Substance name	CAS No.	Concentration	Classification according to 29 CFR 1900.1210
Magnesium Nitrate	13446-18-9	<45.0%	Oxidizing Solid 3 Skin Irritation 2 Eye Irritation 2 Specific Target Organ Toxicity (Single Exposure) 3

This mixture does not, within the current knowledge of the supplier, contain further substances above their cutoff concentration limit fulfilling the criteria of hazard classes according to the 29 CFR 1910.1200 regulation or present a health risk below the cutoff concentration limit. Substances that do not fall within classification criteria are not specified in this document to protect confidentiality.

Additional information: This mixture does not contain further substances fulfilling the criteria of hazard class "acute toxicity" according to the 29 CFR 1910.1200 regulation.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

Take precautions to ensure your own safety when helping another person. Always wear appropriate personal protective equipment (see Section 8). If medical advice is needed, have Safety Data Sheet or product label at hand and provide treatment already administered.

Following inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Following skin contact:

Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice. Store contaminated clothing under water and wash before re-use.

Following eye contact:

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into unaffected eye or onto face. If eye irritation persists: Get medical advice.

Following ingestion:

Rinse mouth. If you are concerned or feel unwell: Call POISON CENTER or doctor.

4.2. Most important symptoms and effects, both acute and delayed.

No information on this product

4.3. Indication of any immediate medical attention and special treatment needed.

No information on this product

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Product is noncombustible but may have oxidizing effect. Choose firefighting measures from surrounding conditions.

5.2. Special hazards arising from the substance or mixture

In the case of inclusion in an ambient fire the following hazardous substances may be released: Nitrous gases (nitric oxides); Metal oxide fume.

5.3. Advice for firefighters

Wear self-contained breathing apparatus. Cool surrounding containers with water spray. If possible, take container out of dangerous zone. Rise in pressure and risk of bursting when heating.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment:

Wear respiratory protection, eye protection, hand protection and body protection. See section 8.2 of this SDS.

Emergency procedures:

Evacuate all individuals. Warn surrounding areas. Isolate the area. Put protective measures in place. Only individuals with suitable personal protective equipment should be allowed into the affected area. Remove the source if safe to do so and provide adequate ventilation in closed spaces. Afterwards ventilate area and wash spill area.



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6.2. Environmental precautions

Hazardous to the aquatic environment. Use as indicated by label or as prescribed by agriculturist. Prevent penetration into water, drainage, sewers or ground. Inform the responsible authorities when large quantities get into water, drainage, sewer, or the ground.

6.3. Methods and material for containment and cleaning up

For containment:

Use suitable closed, labeled containers for disposal in accordance with national and local regulations.

For cleaning up:

Use suitable protective equipment while cleaning if necessary. See section 8.2 of this SDS. Wipe clean with cloth or paper towel. Tested industrial vacuum cleaner or suction device can be used as alternative. Use of blower for clean is not recommended.

6.4. Reference to other sections

See section 8.2 for information on personal protective. See section 13 for disposal methods.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Protective measures:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Fire preventions:

Firefighting equipment must be available. Keep away from open flames. Observe the smoking prohibition. Absolutely no welding in the working area. Only work with vessels and lines after these have been thoroughly rinsed. Work done with fire or open flame should only be carried out with written permission if the risk of fire or explosion cannot eliminate. Keep away from combustible materials. Filter the solutions only with glass wool, glass chips, or ceramic filters. Do not use any filtration materials made of paper which risks ignition after drying. Do not leave any cleaning rags lying in the open.

Environmental precautions:

Dispose in accordance with national and local regulations.

Advice on general occupational hygiene:

Take care to keep workplace clean and dry. Wear personal protective equipment. Avoid skin and eye contact with product. Do not leave container open. Sufficient ventilation must be guaranteed for refilling, transfer or open use. Wash skin with soap and water before breaks and at the end of work and apply fatty skin-care products after washing. Foods, beverages and other articles of consumption must not be consumed at the work areas. Suitable areas are to be designated for these purposes. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Transport in sealed containers above 40 °F. Store in dry, ventilated place in tightly sealed container.

Requirements for storage rooms and vessels:

Do not use any food containers to prevent a mistake. Containers must be labeled clearly and permanently. Store in the original container as much as possible. Store in dry, ventilated place in tightly sealed container above 40 °F.

Packaging materials:

Glass, PE, PP, and PVC

Materials to avoid:

Pharmaceuticals, foods and animal feeds including additives; Infectious, radioactive and explosive substances; Gases; Aerosol; Explosive substances; Pyrophoric substances; Substances liberating flammable gases in contact with water. and organic peroxides and self-reactive substances.

7.3. Specific end uses

See section 1.2. No additional information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

This mixture does not, within the current knowledge of the supplier, contain substances above their cutoff concentration limit fulfilling the criteria of hazard classes according to the 29 CFR 1910.1200 regulation or present a health risk below the cutoff concentration limit. Substances that do not fall within classification criteria are not specified in this document to protect confidentiality.

8.2. Exposure controls

Appropriate engineering controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation are probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Components with occupational exposure limits:

None

Personal protective equipment:

Eye/Face protection:

Wear glasses with side protection.

Skin protection:

Hand protection

Suitable gloves type: Use protective gloves. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well-ventilated location. Pay attention to skin care.

Suitable material:

- Natural rubber/Natural latex (19.7 mil) (use non-powdered and allergen free products)
- Polychloroprene (19.7 mil)
- Nitrile rubber/Nitrile latex (13.8 mil)
- Butyl rubber (19.7 mil)
- Fluoro carbon rubber (15.7 mil)
- Polyvinyl chloride (19.7 mil)

Wear duration with occasional contact (splash)—8 hours. Be aware that the liquid may penetrate gloves. Frequent change is advisable.

Body protection:

Wear an overall or a lab coat.

Respiratory protection:

In an emergency (e.g.: unintentional release of the substance) respiratory protection must be worn. Use suitable respiratory equipment such as MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state: Viscous liquid

Color: Dark brown to black

Odor: Acetous odor

Odor threshold: No data available

	Value	Method	Temperature	Pressure	Remark
pH	3.4–3.8	measured	68 °F	14.7 psi	100% solution
Melting point/freezing point	Not available				
Initial boiling point/boiling range	Not available				
Flash point	Not available				
Evaporation rate	Not available				
Flammability (solid, gas)	Not relevant				
Upper/lower flammability or explosive limits	Not relevant				
Vapor pressure	Not available				
Vapor density	Not available	measured	68 °F	14.7 psi	100% solution
Relative density	1.25–1.29 (10.43 lbs/gal)				
Solubility(ies)	100% soluble in water				
Partition coefficient: n-octanol/water	Not available				



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	Value	Method	Temperature	Pressure	Remark
Auto ignition temperature	Not relevant				
Decomposition temperature	Magnesium nitrate: 626 °F				
Viscosity	Not available				
Explosive Properties	Not relevant				
Oxidizing properties	Not available				

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific test data related to reactivity available for this product.

10.2. Chemical stability

Stable under ambient conditions

10.3. Possibility of hazardous reactions

None known

10.4. Conditions to avoid

None known

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

May include: Magnesium oxide; Nitrogen oxides

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Main routes of exposure:

No data available for occupational handling.

Acute toxicity : Data for hazardous substances

Substance	Oral, LD50	Skin, LD50	Dermal, LD50	Inhalation Dust/Mist, LC50
Magnesium nitrate	5440 mg/kg (rat)	5440 mg/kg (rat)	5440 mg/kg (rat)	Not classified

Hazard classification

Classification	Hazard description
Acute toxicity	Calculations according to 29 CFR 1910.1200 indicated that the ATEmix >2000 mg/kg. Based on available data, the classification criteria according to 29 CFR 1910.1200 are not met.
Skin corrosion/irritation	Magnesium Nitrate is classified as an eye irritant, category 2. Based on concentration thresholds the product is also classified as eye irritant, category 2. Causes severe eye irritation.
Serious eye damage/irritation	Magnesium Nitrate is classified as an eye irritant, category 2. Based on concentration thresholds the product is also classified as eye irritant, category 2. Causes severe eye irritation.
Respiratory sensitization	Not classifiable due to data lacking.
Skin sensitization	Not classifiable due to data lacking.
Germ cell mutagenicity	Not classifiable due to data lacking.
Carcinogenicity	Not classifiable due to data lacking.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT—single exposure	Magnesium Nitrate is classified as Specific Target Organ Toxicity (single exposure), category 2. Based on concentration thresholds the product is also classified as Specific Target Organ Toxicity, category 3. May cause respiratory irritation. May cause drowsiness or dizziness.
STOT—repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Not classifiable due to data lacking.



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Other information:

Main toxic effects

Acute effects: None known

Chronic effects: None known

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity

This mixture does not, within the current knowledge of the supplier, contain substances above their cutoff concentration limit fulfilling the criteria of hazard classes according to the 29 CFR 1910.1200 regulation or present a health risk below the cutoff concentration limit.

Assessment/Classification

Classification is not mandatory.

12.2. Persistence and degradability

Not classifiable due to data lacking

12.3. Bio accumulative potential

Not classifiable due to data lacking

12.4. Mobility in soil

Not classifiable due to data lacking

12.5. Results of persistent, bioaccumulating and toxic and very persistent and very bioaccumulating assessment

Not classifiable due to data lacking

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

If there is no way of recycling it must be disposed of in compliance with the respective national and local regulations.

Collection of small amounts of product:

Do not put waste into sink or dust bin. Collect in container for toxic, inorganic residues and heavy metals salts and their solution. Adjust product to a pH of 6 – 8. Collection vessels must be clearly labeled with a systematic description of their contents. Store the vessels in a well-ventilated location. Entrust them to the appropriate authorities for disposal.

SECTION 14: TRANSPORT INFORMATION

UN Number: Not applicable

UN Proper shipping name: Not applicable

Transport hazard class: Not regulated as a dangerous good

Packaging group: Not regulated as a dangerous good

Environmental hazards: Not regulated as a dangerous good

Transport in bulk according to IMO instrument: Not available

Department of Transportation: Not regulated as a hazardous material by Department of Transportation

International Airport Transport Association: Not regulated as a dangerous good

International Maritime Dangerous Goods: Not regulated as a dangerous good

Special precautions for user: None known

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health, and environmental regulations specific for the substance or mixture

HCS Regulatory 2012; 29 CFR 1910.1200

15.2. Chemical safety assessment

No chemical safety assessment was completed for this product.

SECTION 16: OTHER INFORMATION

16.1. Indication of changes

First revision

16.2. Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HCS: Hazard Communication Standard
LC50: Lethal concentration required to kill 50% of the population
MSHA: Mine Safety and Health Administration
NOISH: National Institute for Occupational Safety and Health
UN: United Nations

16.3. Key literature references and sources for data

C&L Inventory - ECHA [WWW Document], n.d. URL <https://echa.europa.eu/information-on-chemicals/cl-inventory-database> (accessed 6.6.19).
GESTIS Substance database [WWW Document], n.d. URL [http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates\\$fn=default.htm\\$vid=gestiseng:sdbeng\\$3.0](http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates$fn=default.htm$vid=gestiseng:sdbeng$3.0) (accessed 6.6.19).
HAZARD COMMUNICATION: Hazard Classification Guidance for Manufacturers, Importers, and Employers, n.d.
OSHA Occupational Chemical Database | Occupational Safety and Health Administration [WWW Document], n.d. URL <https://www.osha.gov/chemicaldata/> (accessed 6.6.19).

16.4. Classification for mixtures and used evaluation method according to 29 CFR 1910.1200

Classification based on calculation or concentration thresholds. See SECTION 2.1 (classification).

16.5. Relevant H-phrases (number and full text)

Not relevant

16.6. Training advice

Not relevant

16.7. Further information

This SDS summarizes to the best of our knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace.