

Section 1: Product & Company Information

Product Identifier: Magnesium Sulfate, Heptahydrate, USPK**Other Means of Identification**

Product Number: 122254

Recommended Use and Restrictions on UseRecommended Use: No data available.
Restrictions on Use: Not known.**Manufacturer / Importer / Supplier / Distributor Information****Company Name:** CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918
USA**Information Telephone Number:** 1-865-524-4239**Fax Number:** 1-865-524-3375**Website:** www.corecheminc.com**Contact Person:** Regulatory Manager
E-mail: regulatory@corecheminc.com**Emergency Phone Number:** Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

GHS Hazard Classification(s)

Not classified as hazardous according to OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity ²	Common Name/Synonym(s)	CAS # ³	Weight %	Impurity or Stabilizing Additive
Magnesium Sulfate Heptahydrate	-	100034-99-8	100	No

1. Information regarding the composition and the percentage ranges of the mixtures ingredients are not presented as its Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.

2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.

3. “—” Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Inhalation

Move to fresh air. Get medical attention if symptoms persist.

Skin Contact

Wash skin thoroughly with soap and water. If skin irritation or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before reuse.

Eye Contact

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Ingestion

If large quantities of this material are swallowed, call a physician immediately. Do NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed**Symptoms**

May be irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed**Hazards**

No data available.

Treatment

Treat symptomatically.

Section 5: Fire-Fighting Measures

General Fire Hazards

No data available.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

Oxides of sulfur may be generated during fire. Noncombustible.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

No data available.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Wear goggles. If inhalation exposure potential is above the local exposure limits, use appropriate respiratory protection for particulate, in accordance with prevailing regulatory requirements.

Methods and Materials for Containment and Clean-Up

Prevent further leakage or spillage if safe to do so. Sweep, scoop, or vacuum discharged material. Flush residue with water.

Notification Procedures

Notify the relevant authorities.

Environmental Precautions

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Precautions for Safe Handling

Avoid generating dust. Promptly clean up spills.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Type	Value	Guideline
TLV	10 mg/m ³ (Inhalable)	ACGIH
TLV	3mg/m ³ (Respirable)	ACGIH
PEL	15mg/m ³ (Total) 5 mg/m ³ (Respirable)	OSHA

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Ensure adequate ventilation. Ensure eye washes and safety showers are available.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Wear safety glasses with side shields (or goggles). Use tight fitting goggles if dust is generated.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory Protection

In case of inadequate ventilation use suitable respirator. Air-purifying respirator with a high efficiency particulate filter.

Hygiene Measures

Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties**Appearance:**

Physical State: Solid, granular to fine granular
Color: White or transparent

Odor:**Odor Threshold:****pH:****Melting Point/Freezing Point:****Initial Boiling Point and Boiling Range:****Flash Point:****Evaporation Rate (butyl acetate=1):****Flammability (solid, gas):****Upper/Lower Limit on Flammability or Explosive Limits**

Flammability Limit – Upper: No data available.
Flammability Limit – Lower: No data available.
Explosive Limit – Upper: No data available.
Explosive Limit – Lower: No data available.

Vapor Pressure:**Vapor Density (air =1):****Relative Density (water=1):****Solubility(ies):**

Solubility in water: 71 g/100ml at 20° C 91 g/100ml at 40° C
Solubility (other): No data available.

Partition coefficient (n-octanol/water):**Auto-Ignition Temperature:****Decomposition Temperature:****Viscosity:****Other Information:**

Molecular Weight: No data available.
Formula: No data available.

Section 10: Stability and Reactivity**Reactivity**

No data available.

Chemical Stability

Material is stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Metal hydrides and other water reactive materials.

Hazardous Decomposition Products

At very high temperatures, magnesium oxide, sulfur dioxide and sulfur trioxide may be generated.

Section 11: Toxicological Information**Information on routes of exposure**

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye Contact: Dust may be irritating to eyes.

Information on Toxicological Effects**Acute Toxicity (List all possible routes of exposure)****Oral**

Magnesium Sulfate (Cas# 10034-99-8) LD₅₀ 428 mg/kg in man.

Magnesium Sulfate (Cas# 10034-99-8) LD₅₀ 351 mg/kg in woman.

Dermal

No data available.

Inhalation

No data available.

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

No data available.

Serious Eye Damage/Eye Irritation

May irritate eyes.

Respiratory/Skin Sensitization

No data available.

Carcinogenicity**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity**In Vitro**

No mutagenic components identified.

In Vivo

No mutagenic components identified.

Reproductive Toxicity

None known.

Specific Target Organ Toxicity – Single Exposure

None known.

Specific Target Organ Toxicity – Repeated Exposure

None known.

Aspiration Hazard

Not classified.

Other Effects

None known.

Section 12: Ecological Information

Ecotoxicity**Acute Hazards to the Aquatic Environment****Fish**

Magnesium Sulfate Heptahydrate: LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2,610 mg/l

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

This material is not persistent in aquatic systems.

Chronic Hazards to the Aquatic Environment**Fish**

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability**Biodegradation**

The product is not readily biodegradable.

BOD/COD Ratio

No data available.

Bioaccumulative Potential**Biocconcentration Factor (BCF)**

Material does not bioaccumulate.

Partition Coefficient n-octanol / water (log Kow)

No data available.

Mobility in Soil

Sinks and mixes with water.

Other Adverse Effects

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Section 13: Disposal Considerations

Disposal Instructions

Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging

Do not reuse containers.

Section 14: Transportation Information

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.
Listed as magnesium sulfate.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No

Sudden Release of Pressure: No

Reactive: No

Acute (Immediate) Health Hazard: Yes

Chronic (Delayed) Health Hazard: No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 1

Chronic Health Hazard: /

Flammability: 0

Physical Hazard: 0

Personal Protection: X

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Special: N/A

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate	ACGIH - American Conference of Industrial Hygienists
BCF - Bioconcentration Factor	AIHA - American Industrial Hygiene Association
EC50 - Effective concentration, 50%	BEI - Biological Exposure Indices
IDHL - Immediately Dangerous to Life and Health	CAS - Chemical Abstracts Service
Kg - Kilogram	DOT - US Department of Transportation
l - Liter	EPA - US Environmental Protection Agency
lb - Pound	GHS - Globally Harmonized System of Classification and Labelling of Chemicals
LC50 - Lethal Concentration, 50%	IARC - International Agency for Research on Cancer
LD50 - Lethal Dose, 50%	IATA - International Air Transport Association
mg - milligram	IBC - Intermediate Bulk Container
ml - milliliter	IMDG - International Maritime Dangerous Goods
N/A - Not Applicable	NIOSH - National Institute for Occupational Safety and Health
N/D - Not Determined	NTP - National Toxicology Program
PEL - Permissible Exposure Limit	OSHA - US Occupational Health and Safety Administration
REL - Recommended Exposure Limit	SARA - US EPA Superfund Amendments and Reauthorization Act
STEL - Short-term Exposure Limit	TSCA - US EPA Toxic Substances Control Act
TWA - Time weighted average	UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

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