

Magnesium sulfate heptahydrate**13142-6X1KG**

Version 1.1

Revision Date 10/15/2021

Print Date 05/11/2023

SECTION 1. IDENTIFICATION

Product name : Magnesium sulfate heptahydrate

Number : 000000020691

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : solid

Color : colourless

Odor : odourless

Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

Precautionary statements : **Prevention:**
Use personal protective equipment as required.

Hazards not otherwise : Repeated or prolonged exposure may irritate eyes, skin and

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classified

respiratory system.

Carcinogenicity

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, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : $\text{MgO}_4\text{S} \cdot 7\text{H}_2\text{O}$

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Magnesium sulfate-7-hydrate	10034-99-8	100.00 %

SECTION 4. FIRST AID MEASURES

- General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately. Show this safety data sheet to the doctor in attendance.
- Inhalation : If inhaled, remove to fresh air. If symptoms persist, call a physician.
- Skin contact : After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.
- Ingestion : Immediately give large quantities of water to drink. If accidentally swallowed obtain immediate medical attention.

Notes to physician

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Most important symptoms/effects, acute and delayed : No information available.

Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical

Specific hazards during firefighting : In case of fire hazardous decomposition products may be produced such as:
Sulphur oxides
Magnesium oxide

Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
No unprotected exposed skin areas.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Discharge into the environment must be avoided.
Do not flush into surface water or sanitary sewer system.

Methods and materials for : Use mechanical handling equipment.

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containment and cleaning
upSweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations.**SECTION 7. HANDLING AND STORAGE****Handling**

Precautions for safe handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid breathing dust.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety glasses with side-shields

Hand protection : Protective gloves
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Protective suit

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.

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Hygiene measures : Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.
When using do not eat or drink.

Exposure Guidelines

Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Color : colourless

Odor : odourless

Odor threshold : Note: No data available

pH : 5.0 - 9.2 at , 25 °C

Melting point/range : 1,124 °C
Note: Decomposes before melting.

Boiling point/boiling range : Note: not determined

Flash point : Note: Not applicable

Evaporation rate : Note: No data available

Flammability : The product is not flammable.

Lower explosion limit : Note: Not applicable

Upper explosion limit : Note: Not applicable

Vapor pressure : Note: Not applicable

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Vapor density	: Note: Not applicable
Density	: ca. 1.68 g/cm ³ at 20 °C
Water solubility	: 360 g/l at 20 °C
Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Auto-ignition temperature	: Note: not auto-flammable
Decomposition temperature	: Note: Loss of water of crystallization on heating.
Viscosity, dynamic	: Note: Not applicable
Viscosity, kinematic	: Note: Not applicable
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 246.47 g/mol
Bulk density	: ca. 1,060 kg/m ³

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous	: Hazardous polymerisation does not occur.

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reactions
Conditions to avoid : Protect against water.

Incompatible materials : None known.

Hazardous decomposition products : Sulphur oxides
Magnesium oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: > 2,000 mg/kg
Species: Rat
Method: OECD Test Guideline 425
Note: REACH dossier "read-across"

Acute inhalation toxicity : Note: No data available

Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: Rat
Method: OECD Test Guideline 402
Note: REACH dossier "read-across"

Skin irritation : Note: Not classified due to data which are conclusive although insufficient for classification.

Eye irritation : Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
Note: REACH dossier "read-across"

Sensitisation : Mouse local lymph node assay
Species: Mouse
Result: Did not cause sensitisation on laboratory animals.
Classification: non-sensitizing
Test substance: anhydrous substance

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Method: OECD Test Guideline 429

Genotoxicity in vitro : Note: Not classified due to data which are conclusive although insufficient for classification.

Carcinogenicity : Species: not specified
Note: No data available

Reproductive toxicity : Species: not specified
Note: Not classified due to data which are conclusive although insufficient for classification.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish : LC50: 680 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
Note: REACH dossier "read-across"

Toxicity to daphnia and other aquatic invertebrates : EC50: 720 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Note: REACH dossier "read-across"

Toxicity to algae : Note: Not classified due to data which are conclusive although insufficient for classification.

Toxicity to bacteria : EC50: 84 mg/l
Exposure time: 30 min
Species: Bacteria
Test substance: anhydrous substance

Elimination information (persistence and degradability)

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Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology

Additional ecological information : The product causes no biological oxygen consumption.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemicals Act (AIC), as amended : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

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Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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

SARA 311/312 Hazards : No SARA Hazards

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

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	HMIS III	NFPA
Health hazard	: 1	1
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group