

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

SECTION 1. IDENTIFICATION

Product name : Magnesium sulfate hydrate

Number : 000000021410

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

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

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 : $\text{MgO}_4\text{S} \cdot x\text{H}_2\text{O}$

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Magnesium sulfate hydrate	22189-08-8	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.
- 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. Rinse mouth. Consult a physician.

Notes to physician

Most important : No information available.

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

symptoms/effects, acute and
delayed

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

SECTION 5. FIREFIGHTING MEASURES

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

Specific hazards during : The product is not flammable.
firefighting In case of fire hazardous decomposition products may be
produced such as:
Sulphur oxides
Magnesium oxide

Special protective equipment : Wear self-contained breathing apparatus and protective suit.
for firefighters

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, : Evacuate personnel to safe areas.
protective equipment and : Wear personal protective equipment. Unprotected persons
emergency procedures : 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.
Do not flush into surface water or sanitary sewer system.
Discharge into the environment must be avoided.

Methods and materials for : Use mechanical handling equipment.
containment and cleaning : Sweep up and shovel into suitable containers for disposal.

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

up

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 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.
Avoid contact with skin, eyes and clothing.

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.

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

Hygiene measures : General industrial hygiene practice.

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	: Note: neutral
Melting point (decomposition)	: 1,124 °C
Boiling point/boiling range	: Note: No data available
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: No data available
Vapor density	: Note: No data available

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

Density	: Note: No data available
Water solubility	: Note: completely soluble
Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
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	: 120.37 g/mol
Bulk density	: ca. 530 kg/m ³

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Avoid dust formation.
Incompatible materials	: None known.
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as:

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

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.
Test substance: anhydrous substance
Method: OECD Test Guideline 429
- Genotoxicity in vitro : Note: Not classified due to data which are conclusive although insufficient for classification.

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

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: 84,000 mg/l
Exposure time: 30 min
Species: Bacteria

Elimination information (persistence and degradability)

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

Further information on ecology**SECTION 13. DISPOSAL CONSIDERATIONS**

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

SECTION 14. TRANSPORT INFORMATION

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

DOT Not dangerous goods**TDG** Not dangerous goods**IATA** Not dangerous goods**IMDG** Not dangerous goods**SECTION 15. REGULATORY INFORMATION****Inventories**US. Toxic Substances : On TSCA Inventory
Control ActAustralia. Industrial : Not in compliance with the inventory
Chemicals Act (AICC), as
amendedCanada. Canadian : All components of this product are on the Canadian DSL
Environmental Protection
Act (CEPA). Domestic
Substances List (DSL)

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

Korea. Existing Chemicals : On the inventory, or in compliance with the inventory
Inventory (KECI)Philippines. Inventory of : On the inventory, or in compliance with the inventory
Chemicals and Chemical
Substances (PICCS)China. Inventory of Existing : On the inventory, or in compliance with the inventory
Chemical Substances
(IECSC)New Zealand. Inventory of : Not in compliance with the inventory
Chemicals (NZIoC), as
published by ERMA New
Zealand

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

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

	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,

Magnesium sulfate hydrate**13143-6X1KG**

Version 1.2

Revision Date 12/08/2021

Print Date 05/11/2023

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.

Previous Issue Date: 03/26/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group