



Safety Data Sheet

According to 29 CFR 1910.1200

SDS No. 1245

Review date: October 19, 2018

1 Identification of substance and company

Product details

Product name:

Magnesium sulfate, anhydrous

Product code:

13645, C2591, C2639, C2777

Relevant identified uses of the substance:

Research and product development

Manufacturer/Supplier:

Noah Technologies Corporation

1 Noah Park

San Antonio, Texas 78249-3419

Phone: (210) 691-2000

Web site: www.noahtech.com

Emergency information:

CHEMTREC

800-424-9300

2 Hazards identification

Hazard classification:

Not a hazardous substance or mixture

Information pertaining to particular dangers

for man and environment:

Not applicable

HMIS ratings (scale 0-4):

Health: 1

Flammability: 0

Physical hazard: 0

3 Composition/Information on ingredients

Chemical name:

Magnesium sulfate

Designation: (CAS#):

7487-88-9

Formula:

MgSO₄

Synonyms:

Magnesium sulphate, dried epsom salt

Identification number(s):

EC Number:

231-298-2

4 First aid measures

After inhalation:

Seek immediate medical advice

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

After skin contact:

Instantly wash with water and soap and rinse thoroughly

If irritation persists, consult a physician

After eye contact:

Rinse opened eye for at least 15 minutes under running water. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

After swallowing:

If conscious, rinse mouth out with water and seek medical attention

Information for doctor:

The following symptoms may occur:

May cause muscle weakness, cardiac arrhythmias, respiratory effects and changes in blood chemistry

5 Fire-fighting measures

Suitable extinguishing agents:

Use extinguishing media most appropriate to surrounding fire conditions

Special hazards caused by the material, its products of combustion or resulting gases:

In case of fire, the following can be released:

Oxides of magnesium and sulfur (SO_x)

Protective equipment:

Wear self-contained breathing apparatus

Wear fully protective fire fighting equipment/clothing in fire situations

6 Accidental release measures

Person-related safety precautions:

Wear personal protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits

Measures for cleaning/collecting:

Dispose of contaminated material as waste according to item 13

Place in a suitable container for proper disposal

Ventilate and wash spill site after material removal is complete

Additional information: See Section 7 for information on safe handling
See Section 8 for information on personal protective equipment
See Section 13 for information on disposal

7 Handling and storage

Information for safe handling: Keep containers tightly sealed
Store in cool, dry place in tightly closed containers
Ensure good ventilation/exhaustion at the workplace

Information about protection against explosions and fires: None known

Storage requirements to be met by storerooms and containers: No special requirements

Information about storage in one common storage facility: Do not store together with oxidizing materials

Further information about storage conditions: Keep container tightly sealed
Store in cool, dry conditions in well sealed containers

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute

Components with critical values that require monitoring at the workplace: None

Additional information: None

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals
Keep away from foodstuffs, beverages and food
Instantly remove any soiled and impregnated garments
Wash hands during breaks and at the end of the work

Respiratory protection: Use suitable respirator when high concentrations are present
Use only NIOSH/MESA or CEN approved dust mask type N95 or TYPE P1 (EN 143)

Hand protection: Impervious gloves

Eye protection: Safety glasses

Skin protection: Protective work clothing

Additional protective equipment: Sufficient to prevent contact
Emergency eyewash and safety shower

9 Physical and chemical properties

General Information:

Physical state: Powder

Color: White

Smell: Odorless

Molecular Weight (Calculated): 120.37

pH (5% solution) 6 - 7

Melting point/range: 1124 C (decomposes)

Boiling point/range: Not determined

Sublimation temperature/start: Not determined

Flash point: Non-flammable

Autoignition temperature: Not determined

Decomposition temperature: Not determined

Danger of explosion: Not determined

Flammable limits:

Lower: Not determined

Upper: Not determined

Vapor pressure (mm Hg): Not determined

Specific gravity at 20 °C 2.66

Solubility in/Miscibility with water: 260 g/L @ 0 C
738 g/L @ 100 C

10 Stability and reactivity

Conditions to be avoided: No decomposition if used and stored according to specifications
See section 7 for information on proper handling and storage

Materials to be avoided: Strong acids
Oxidizing agents

Dangerous reactions: No dangerous reactions known

Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:	
LD/LC50 values that are relevant for classification:	Oral-rabbit LD _{Lo} 3000 mg/kg Oral-mouse LD _{Lo} 5000 mg/kg
Primary irritant effect:	
on the skin:	May cause mild irritation
on the eye:	May cause mild irritation
Sensitization:	No sensitizing effect known
Additional toxicological information:	Moderately toxic by ingestion, intraperitoneal, and subcutaneous routes. Inhalation of magnesium compounds may cause metal fume fever. Systemic effects: heart changes, cyanosis, flaccid paralysis with appropriate anesthesia. To the best of our knowledge the acute and chronic toxicity of the substance is not fully known
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12 Ecological information

General notes:	Fathead minnow LC ₅₀ : 2820 mg/L:96H Daphnia magna EC ₅₀ : 343.56 mg/L:48H Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system Do not allow material to be released to the environment without proper governmental permits
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13 Disposal considerations

Product recommendation:	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
Unclean packaging recommendation:	Disposal must be made according to official regulations
Recommended cleaning agent:	Water, if necessary with cleaning agent

14 Transport information

land transport DOT:	
Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Magnesium sulfate
Air transport ICAO-TI and IATA-DGR:	
Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Magnesium sulfate
UPS Ground/ FedEx Ground:	
Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Magnesium sulfate
UPS Air:	
Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Magnesium sulfate

15 Regulatory information

SARA Section 302 Extremely Hazardous components and corresponding TPQs:	Not classified
SARA Section 311 / 312 hazards:	Not classified
SATA Section 313 components:	Not classified
California Proposition 65 components:	Not classified
TSCA:	This material is listed on TSCA inventory

16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.