Safety data sheet

ChemiPURE Magnesium Chloride Hexahydrate

Product name ChemiPURE Magnesium Chloride Hexahydrate	Catalog no. MCH605, MCH610
Synonyms Magnesium chloride hexahydrate; Magnesium dichloride hexahydrate	SDS revision -
CAS no. 7791-18-6	Format version / date 3 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ChemiPURE Magnesium Chloride Hexahydrate
Product code	MCH605; MCH610 (same substance, different package sizes)
CAS number	7791-18-6
EC number	232-094-6
Recommended use	For research use only. Laboratory chemical for preparation of molecular biology buffers and aqueous magnesium-containing solutions.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10, Yakutiye, Erzurum, Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP).
Label elements	No hazardous label elements required.
Symbols / pictograms	None
Signal word	None
Hazard statements	None
Precautionary statements - Prevention	Avoid creating or breathing dust. Wear protective gloves and safety eyewear. Wash hands after handling.
Precautionary statements - Response	If in eyes, rinse cautiously with water. If on skin, wash with water. Obtain medical advice if symptoms persist.
Other hazards	Dust may cause mechanical irritation of the eyes or respiratory tract. Hygroscopic material; protect from moisture.

Composition & response

ChemiPURE Magnesium Chloride Hexahydrate | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ChemiPURE Magnesium Chloride Hexahydrate
Synonyms	Magnesium chloride hexahydrate; Magnesium dichloride hexahydrate
Concentration	Magnesium chloride hexahydrate: >=99% (product purity).
Formula	$MgCl_2 . 6H_2O$
Molecular weight	203.30 g/mol
Mixture statement	Substance: Magnesium chloride hexahydrate (CAS 7791-18-6; EC 232-094-6), >=99%. No additional hazardous constituents requiring disclosure identified.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with plenty of water for several minutes. Remove contact lenses, if present and easy to do. Seek medical advice if irritation persists.
Skin contact	Remove contaminated clothing. Wash affected skin with plenty of water. Seek medical advice if symptoms occur.
Inhalation	Move the affected person to fresh air. If breathing discomfort or irritation persists, obtain medical attention.
Ingestion	Rinse mouth with water. If conscious, give water to drink. Seek medical advice if feeling unwell. Do not give anything by mouth to an unconscious person.
Self-protection of first aider	Avoid dust exposure. Wear appropriate gloves and eye protection.
Most important symptoms / effects	No specific acute hazard is identified in normal use; high dust exposure may cause mild irritation. Large oral doses may produce gastrointestinal symptoms.
Notes to physicians	Treat symptomatically.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing media suitable for the surrounding fire: water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	No specific restrictions identified for this substance.
Special hazards arising from the substance or mixture	Non-combustible solid. A surrounding fire may cause release of hydrogen chloride gas and magnesium oxide.
Explosion data	Not classified as explosive or flammable. No specific explosive properties known.
Advice for firefighters	Use self-contained breathing apparatus and protective clothing in a fire; avoid breathing decomposition fumes.

Safe use & protection

ChemiPURE Magnesium Chloride Hexahydrate | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Avoid inhaling dust. Provide adequate ventilation. Wear protective gloves, laboratory clothing and suitable eye protection.
Environmental precautions	Prevent large quantities from entering drains, waterways or the environment.
Methods and materials for containment and cleaning up	Collect mechanically in a dry manner without producing dust. Place into appropriate closed, labelled containers; clean affected surfaces.
Reference to other sections	See Sections 8 and 13 for personal protection and disposal.

07 HANDLING AND STORAGE

Precautions for safe handling	Use standard laboratory hygiene practices. Avoid unnecessary dust generation or contact with eyes. Ensure adequate ventilation. Wash hands after use.
Conditions for safe storage	Keep tightly closed in a cool, dry area at 15-25 deg C. Protect from humidity and moisture. Store separately from incompatible materials.
Container labeling	Store in original or correctly labelled, tightly closed containers.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No substance-specific occupational exposure limit values identified. Observe general occupational exposure limits for inhalable and respirable dust.

8.2 Exposure controls

Engineering measures	Provide adequate general ventilation and local exhaust where dust may be formed. Ensure access to an eyewash station.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands and exposed skin after work; remove contaminated clothing.
Eye / face protection	Safety glasses or protective goggles meeting EN 166 or equivalent.
Hand protection	Appropriate chemical-resistant gloves, such as nitrile. Select gloves for the specific task and inspect before use.
Skin and body protection	Laboratory coat and suitable protective clothing.
Respiratory protection	Normally unnecessary with adequate ventilation and controlled dust. Where dust is generated, use suitable particulate respiratory protection.

Material properties

ChemiPURE Magnesium Chloride Hexahydrate | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Colorless to white crystalline solid; crystals or powder
Odor	Odorless
Odor threshold	Not applicable
pH	No data available for the solid
Melting point / freezing point	Approximately 116.7 deg C (decomposes on heating)
Initial boiling point and boiling range	No data available
Flash point	Not applicable to a non-combustible inorganic solid
Evaporation rate	Not applicable
Flammability (solid, gas)	Not flammable
Upper / lower flammability or explosive limits	Not applicable
Vapor pressure	No data available
Vapor density	Not applicable to a solid
Relative density	Approximately 1.57 g/cm3 at 20 deg C
Solubility(ies)	Water: approximately 468.7 g/L at 20 deg C
Partition coefficient: n-octanol / water	Not applicable to an inorganic substance
Auto-ignition temperature	Not applicable
Decomposition temperature	No further data available
Viscosity	Not applicable to a solid
Explosive properties	Not classified as explosive
Oxidizing properties	Not classified as oxidizing

10 STABILITY AND REACTIVITY

Reactivity	No unusual reactivity expected under normal handling conditions.
Chemical stability	Chemically stable under ordinary ambient conditions when kept dry and tightly closed.
Possibility of hazardous reactions	No hazardous reactions known under normal handling and storage conditions.
Conditions to avoid	Excessive heat, moisture, humidity and unnecessary dust formation.
Incompatible materials	No specific incompatibilities identified; avoid contamination with reactive substances.
Hazardous decomposition products	Hydrogen chloride and magnesium oxide may be released during strong heating or fire exposure.

Health & environment

ChemiPURE Magnesium Chloride Hexahydrate | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Oral LD50 (rat): >5,000 mg/kg; dermal LD50 (rat): >2,000 mg/kg (available data for magnesium chloride).
Skin corrosion / irritation	Not classified. Available in-vitro evidence indicates no skin irritation.
Serious eye damage / eye irritation	Not classified. Available eye test data indicate no eye irritation.
Carcinogenicity	No data available; no classification assigned based on available information.
Reproductive toxicity	No data available.
STOT - SE	No data available.
STOT - RE	No data available.
Aspiration hazard	Not applicable to a solid.

11.2 Potential health effects

Ingestion: Large quantities may cause nausea, vomiting or diarrhea.
Inhalation: Airborne dust may irritate the respiratory tract.
Skin: No known significant effects from routine contact.
Eyes: Airborne dust may cause transient mechanical irritation.

11.3 Additional information

Adverse systemic effects are unlikely under normal laboratory use. Additional substance-specific toxicological data are limited.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50 (96 h): approximately 2,119 mg/L; Daphnia magna LC50 (48 h): approximately 548 mg/L (available magnesium chloride data).
Persistence and degradability	Biodegradability criteria are not applicable to inorganic substances.
Bioaccumulative potential	No data available.
Mobility in soil	Water-soluble substance; may be mobile in water. No quantitative data available.
Results of PBT and vPvB assessment	No assessment available; PBT/vPvB criteria generally do not apply to inorganic salts.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose of excess material through an authorized chemical waste service in accordance with applicable local and national regulations. Do not allow large quantities to enter drains.
Contaminated packaging	Dispose of as unused product unless cleaned and permitted for recycling according to local requirements.

Transport & reference

ChemiPURE Magnesium Chloride Hexahydrate | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	-	Not regulated	-	-	No
IMDG	-	Not regulated	-	-	No
IATA	-	Not regulated	-	-	No

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP). Not classified as hazardous under CLP on available data.
Environmental hazards	Not classified as environmentally hazardous based on the available data.
Chemical safety assessment	No product-specific chemical safety assessment available.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail