



# 化学品安全技术说明书 (Material Safety Data Sheet MSDS)

## 产品名称: 无水硫酸镁 (Magnesium Sulfate Anhydrous)

CAS 号: 7487-88-9 | EINECS 号: 231-298-2 | 版本号: 1.0 | 编制日期: 2026 年 1 月 27 日 | 修订日期: 无

编制依据: 联合国 GHS 第 9 版、欧盟 REACH 法规、美国 OSHA HazCom 2012 标准

## 第 1 部分: 化学品及企业标识 (Section 1: Chemical Product and Company Identification)

化学品中文名: 无水硫酸镁 | 化学品英文名: Magnesium Sulfate Anhydrous

其他名称: 硫酸镁 (无水)、 $MgSO_4$  | 产品用途: 工业级, 用于化工、医药、农业、食品添加剂等领域 (Industrial grade, used in chemical industry, pharmaceuticals, agriculture, food additives, etc.)

企业名称: 莱州市百业鑫化工有限公司 | **Company Name:** Laizhou Baiyexin Chemical Co., Ltd.

企业地址: 山东省烟台市莱州市土山镇银海工业园 | **Company Address:** Yin Hai Industrial Park, Tushan Town, Laizhou City, Yantai City, Shandong Province, China

联系电话: +86 19653602589 | **Contact Phone:** +86 19653602589

应急电话: +86 19653602589 (24 小时) | **Emergency Phone:** +86 19653602589 (24 hours)

## 第 2 部分: 危险性概述 (Section 2: Hazards Identification)

**GHS 危险性分类:** 根据 GHS 第 9 版标准, 本品未被分类为危险化学品 (Not classified as hazardous according to GHS Rev. 9)

危险象形图: 无 (No hazard pictogram) | 信号词: 无 (No signal word)

危险说明: 无 (No hazard statements)

防范说明 (Precautionary Statements):



- 预防 (Prevention) : 避免粉尘吸入; 操作后彻底清洗双手 (Avoid dust inhalation; Wash hands thoroughly after handling)
- 响应 (Response) : 若接触眼睛/皮肤, 用大量清水冲洗 (In case of contact with eyes/skin, rinse thoroughly with plenty of water)
- 储存 (Storage) : 密封保存于干燥通风处 (Store sealed in a dry and well-ventilated place)
- 处置 (Disposal) : 按当地法规处置废弃物 (Dispose of waste in accordance with local regulations)

其他危害: 无已知特殊危害, 过量摄入可能引起肠胃不适 (No other known special hazards; Excessive ingestion may cause gastrointestinal discomfort)

### 第 3 部分: 成分/组成信息 (Section 3: Composition/Information on Ingredients)

物质类型: 纯品 (Pure Substance)

组分 (Component)	CAS 号	EC 号	质量分数 (Mass Fraction)
无水硫酸镁 (Magnesium Sulfate Anhydrous)	7487-88-9	231-298-2	≥99.0%
杂质 (Impurities)	无特定主要杂质	无	≤1.0%

### 第 4 部分: 急救措施 (Section 4: First-Aid Measures)

吸入 (Inhalation) : 转移至空气新鲜处, 保持呼吸通畅; 若出现不适, 就医 (Remove to fresh air, keep breathing unobstructed; Seek medical attention if discomfort occurs)

皮肤接触 (Skin Contact) : 用大量流动清水冲洗皮肤至少 15 分钟, 去除污染衣物; 无刺激反应, 若持续不适就医 (Rinse skin with plenty of running water for at least 15 minutes, remove contaminated clothing; No irritating reaction, seek medical attention if discomfort persists)

眼睛接触 (Eye Contact) : 立即用大量流动清水冲洗眼睛 15-20 分钟, 可摘除隐形眼镜 (若易操作); 无刺激反应, 必要时就医 (Immediately rinse eyes with plenty of running water for 15-20 minutes, remove contact lenses if easily possible; No irritating reaction, seek medical attention if necessary)



**食入 (Ingestion)** : 漱口, 饮用 1-2 杯水稀释; 过量摄入可能引起腹泻、呕吐, 就医对症治疗 (Rinse mouth, drink 1-2 glasses of water to dilute; Excessive ingestion may cause diarrhea and vomiting, seek medical treatment for symptoms)

**医疗提示**: 告知医生接触物质名称, 无特定解毒剂, 对症治疗 (Inform doctor of the substance name; No specific antidote, treat symptomatically)

## 第 5 部分: 消防措施 (Section 5: Fire-Fighting Measures)

**燃烧性**: 本品不燃 (Non-combustible)

**合适灭火剂**: 若周围起火, 使用适用灭火剂 (如干粉、二氧化碳、水) (If fire occurs nearby, use appropriate extinguishing media such as dry powder, carbon dioxide, water)

**危险燃烧产物**: 高温下可能释放刺激性含硫气体 (Irritating sulfur-containing gases may be released at high temperatures)

**消防人员防护**: 佩戴防毒面具 (若有烟雾)、穿消防防护服, 在上风向灭火 (Wear gas mask (if smoke exists) and fire protective clothing, fight fire from upwind direction)

## 第 6 部分: 泄漏应急处理 (Section 6: Accidental Release Measures)

**个人防护**: 佩戴防尘口罩、手套, 避免粉尘扩散 (Wear dust mask and gloves to prevent dust dispersion)

**小量泄漏**: 用干净铲子收集于密封容器中, 用于后续处理或回收 (For small spills, collect with a clean shovel into a sealed container for subsequent disposal or recycling)

**大量泄漏**: 用防水布覆盖防止扩散, 构筑围堤收容, 按当地法规处置 (For large spills, cover with waterproof cloth to prevent dispersion, build dikes for containment, dispose in accordance with local regulations)

**环境保护**: 避免泄漏物进入水体、土壤, 若污染水体需及时报告当地环保部门 (Prevent spillage from entering water bodies and soil; Report to local environmental protection department if water is contaminated)

## 第 7 部分: 操作处置与储存 (Section 7: Handling and Storage)

**操作处置 (Handling)** :

- 操作时保持通风, 避免产生大量粉尘, 防止粉尘吸入 (Keep ventilation during operation, avoid generating excessive dust, prevent dust inhalation)
- 避免与不相容物质接触 (Avoid contact with incompatible substances)
- 操作后及时清洗双手及接触部位 (Clean hands and contact parts in time after operation)



储存 (Storage) :

- 储存于干燥、通风、阴凉处，远离水源、潮湿环境 (Store in a dry, well-ventilated, cool place, away from water sources and humid environments)
- 密封包装，防止吸潮结块 (Sealed packaging to prevent moisture absorption and caking)
- 与强酸、强碱分开存放，垛距合理，便于通风 (Store separately from strong acids and alkalis, with reasonable stack spacing for ventilation)

## 第 8 部分：接触控制和个体防护 (Section 8: Exposure Controls/Personal Protection)

职业接触限值：无特定国际统一接触限值 (No specific international unified occupational exposure limit)

工程控制：加强通风，安装粉尘收集装置 (Strengthen ventilation and install dust collection devices)

个体防护 (Personal Protection) :

- 呼吸系统防护：粉尘环境佩戴防尘口罩 (Respiratory protection: Wear dust mask in dusty environment)
- 眼睛防护：佩戴防护眼镜，防止粉尘入眼 (Eye protection: Wear safety goggles to prevent dust from entering eyes)
- 手防护：佩戴丁腈橡胶手套 (Hand protection: Wear nitrile rubber gloves)
- 皮肤防护：穿着工作服，避免皮肤直接接触 (Skin protection: Wear work clothes to avoid direct skin contact)

## 第 9 部分：理化特性 (Section 9: Physical and Chemical Properties)

项目 (Item)	中文描述	English Description
外观与性状	无色斜方晶系结晶，无臭 无味	Colorless rhombic crystal, odorless and tasteless
密度 (25°C)	2.66 g/mL	2.66 g/mL (25°C)
熔点	1124°C (分解)	1124°C (decomposition)
蒸气压 (20°C)	<0.1 mmHg	<0.1 mmHg (20°C)



溶解性	易溶于水、甘油，难溶于乙醇，不溶于丙酮	Soluble in water and glycerol, slightly soluble in ethanol, insoluble in acetone
闪点	无（不燃）	None (non-combustible)

## 第 10 部分：稳定性和反应性 (Section 10: Stability and Reactivity)

稳定性：常温常压下稳定 (Stable under normal temperature and pressure)

避免条件：潮湿环境、高温 (Humid environment, high temperature)

不相容物质：强酸、强碱 (Strong acids, strong alkalis)

危险反应：无已知危险反应 (No known hazardous reactions)

分解产物：高温分解产生氧化镁、三氧化硫 (Decomposes at high temperature to produce magnesium oxide and sulfur trioxide)

## 第 11 部分：毒理学信息 (Section 11: Toxicological Information)

急性毒性 (Acute Toxicity) :

- 大鼠经口 LD<sub>50</sub> : 5000 mg/kg (无明显毒性反应) (Oral LD<sub>50</sub> , rat: 5000 mg/kg, no obvious toxic reaction)
- 大鼠经皮 LD<sub>50</sub> : >2000 mg/kg (无皮肤刺激) (Dermal LD<sub>50</sub> , rat: >2000 mg/kg, no skin irritation)

皮肤刺激：无皮肤刺激性 (OECD 测试导则 402) (No skin irritation, OECD Test Guideline 402)

眼睛刺激：无眼睛刺激性 (家兔试验, OECD 测试导则 405) (No eye irritation, rabbit test, OECD Test Guideline 405)

过敏反应：无已知皮肤或呼吸过敏反应 (No known skin or respiratory allergic reactions)

毒代动力学：镁离子主要经肾脏排泄，与血清浓度和肾小球滤过率成正比 (Magnesium ions are excreted mainly by the kidneys, proportional to serum concentration and glomerular filtration rate)

## 第 12 部分：生态学信息 (Section 12: Ecological Information)

生态毒性 (Ecotoxicity) :



- 水蚤 LC<sub>50</sub> : 720 mg/L (48 小时, 大型蚤) (Daphnia magna LC<sub>50</sub> : 720 mg/L, 48 hours)
- 藻类 EC<sub>50</sub> : 2700 mg/L (72 小时, 小球藻) (Chlorella vulgaris EC<sub>50</sub> : 2700 mg/L, 72 hours)

持久性和降解性: 不易生物降解, 在环境中可稳定存在 (Not easily biodegradable, stable in the environment)

生物累积性: 无生物累积潜力 (No bioaccumulation potential)

环境影响: 通常对水体无危害, 未经许可不得排入环境 (Generally no harm to water bodies; Do not discharge into the environment without permission)

## 第 13 部分: 废弃处置 (Section 13: Disposal Considerations)

废弃物性质: 非危险废弃物 (Non-hazardous waste)

处置方法:

- 可回收利用的废弃物, 经提纯后回收使用 (Recyclable waste can be recycled after purification)
- 不可回收部分, 按当地环保法规处置, 可采用焚烧或安全填埋 (Non-recyclable parts shall be disposed in accordance with local environmental regulations, incineration or safe landfill can be used)

包装处置: 污染的包装需清洗干净后回收, 或按废弃物处置 (Contaminated packaging shall be cleaned for recycling or disposed as waste)

## 第 14 部分: 运输信息 (Section 14: Transport Information)

联合国危险货物编号 (UN 号): 无 (非危险货物) (None, non-hazardous goods)

联合国运输名称: 无水硫酸镁 (非危险货物) (Magnesium Sulfate Anhydrous, non-hazardous goods)

运输危险性分类: 非危险货物 (Non-hazardous for transport)

包装组: 无 (No packaging group)

海洋污染物: 否 (No)

运输注意事项:

- 运输车辆需干燥、清洁, 避免潮湿 (Transport vehicles shall be dry and clean, avoid moisture)
- 包装牢固, 防止破损、泄漏、吸潮 (Firm packaging to prevent damage, leakage and moisture absorption)
- 避免与强酸、强碱混运, 远离热源、水源 (Avoid mixed transportation with strong acids and alkalis, keep away from heat sources and water sources)
- 运输过程中防雨、防潮、防晒 (Protect from rain, moisture and sunlight during transportation)



## 第 15 部分：法规信息 (Section 15: Regulatory Information)

**欧盟法规:** 符合 REACH 法规 (EC No. 1907/2006), 已列入 EINECS 目录 (Complies with REACH Regulation (EC No. 1907/2006), listed in EINECS directory)

**美国法规:** 符合 OSHA HazCom 2012 标准, 已列入 TSCA 目录 (Complies with OSHA HazCom 2012 standard, listed in TSCA directory)

**中国法规:** 符合《危险化学品安全管理条例》, 本品非危险化学品; 符合 GB/T 16483-2008、GB/T 17519-2013 标准 (Complies with "Regulations on the Safety Administration of Hazardous Chemicals", this product is non-hazardous chemical; Complies with GB/T 16483-2008 and GB/T 17519-2013 standards)

**其他:** 遵循进口国当地化学品管理法规 (Comply with local chemical management regulations of the importing country)

## 第 16 部分：其他信息 (Section 16: Other Information)

**编制说明:** 本 SDS 基于现有数据编制, 数据来源于权威化学品数据库及试验报告, 仅供外贸客户使用及进出口通关参考 (This SDS is compiled based on existing data from authoritative chemical databases and test reports, for foreign trade customers' use and import-export customs clearance reference only)

**免责声明:** 使用本品前需确认符合当地法规及使用场景要求, 本公司对不当使用造成的损失不承担责任 (Confirm compliance with local regulations and application scenarios before use; Our company is not liable for losses caused by improper use)

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