

DAZZLING®

90% Magnesium Oxide · 氧化镁

Issued by: Hubei Daheng Agricultural Science and Technology Development Co., Ltd.

出具单位: 湖北达亨农业科技发展有限公司

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HS code: 2519903000 (CN national code — confirm with your broker)

TDS 技术数据表

Technical Data Sheet — Magnesium Oxide

一、TDS 技术数据表

技术数据表 TDS

产品名称: 氧化镁

企业名称: 湖北达亨农业科技发展有限公司

地址: 湖北省枣阳市环城鲍庄村九组

联系电话: 13816672110

邮箱: wangyazhong@dahengagro.com

编制日期: 2026-09-13

HS 编码: 2519903000

CAS 号: 1309-48-4

分子式: MgO

生产工艺: 菱镁矿经 700~900°C 煅烧而成 (矿源煅烧)

执行标准: YB/T 5206-2023

项目指标:

氧化镁 $\text{MgO} \geq 90.0\%$

活性氧化镁 $\geq 65\%$

氧化钙 $\text{CaO} \leq 2.5\%$

二氧化硅 $\text{SiO}_2 \leq 4.0\%$

三氧化二铁 $\text{Fe}_2\text{O}_3 \leq 1.0\%$

三氧化二铝 $\text{Al}_2\text{O}_3 \leq 1.0\%$

烧失量 $\leq 6.0\%$

外观: 白色至浅米黄色粉末

特性: 高活性, 遇湿气吸潮、水化放热 —

用途: 镁基凝胶材料、土壤改良、肥料原料、脱硫原料 储存条件: 密封包装, 干燥阴凉保存, 严防受潮结块

备注: 本品为菱镁矿煅烧矿产品, 非化学合成氧化镁

Technical Data Sheet

English · Magnesium Oxide

90% Magnesium Oxide

HS Code: 2519903000 | CAS No.: 1309-48-4 | Enterprise: Hubei Daheng Agricultural Science and Technology Development Co., Ltd.

Product Description

Produced by calcining magnesite at 700~900°C, mineral-sourced caustic magnesia (light-burned magnesia grain). High activity, highly susceptible to moisture absorption and hydration. Non-hazardous goods. Applied in agricultural fertilizers and magnesium-based building materials.

TDS Technical Data Sheet

Product Name: Magnesium Oxide

Company: Hubei Daheng Agricultural Science and Technology Development Co., Ltd.

Address: Group 9, Baozhuang Village, Huancheng Subdistrict, Zaoyang City, Hubei Province, P.R. China

Tel: +86 138 1667 2110

Email: wangyazhong@dahengagro.com

Date of Issue: 20260913

HS Code: 2519903000 CAS No.: 1309-48-4

Molecular Formula: MgO

Manufacturing Process: Calcination of magnesite at 700~900°C (mineralsource calcination)

Applicable Standard: YB/T 52062023

Item Specification: Magnesium Oxide (MgO) $\geq 90.0\%$ Active Magnesium Oxide $\geq 65\%$ Calcium Oxide (CaO) $\leq 2.5\%$

Silicon Dioxide (SiO₂) $\leq 4.0\%$ Ferric Oxide (Fe₂O₃) $\leq 1.0\%$ Aluminium Oxide (Al₂O₃) $\leq 1.0\%$ Loss on Ignition $\leq 6.0\%$

Appearance: White to pale beige powder **Properties:** High activity; absorbs moisture and releases heat upon hydration

Applications: Magnesiumbased cementitious materials, soil amendment, fertilizer raw material, desulfurization feedstock

Storage: Hermetically sealed packaging. Store in cool and dry place. Prevent caking caused by moisture. **Remark:** This product is calcined mineral from magnesite, not synthetic magnesium oxide.

SDS 化学品安全技术说明书

Safety Data Sheet — Magnesium Oxide (Chinese)

SDS 安全技术说明书

化学品安全技术说明书 SDS

1. 化学品及企业标识

产品名称: 氧化镁

CAS 号: 1309-48-4

EC号: 215-171-9

HS 编码: 2519903000

生产商 / 供货方: 湖北达亨农业科技发展有限公司

地址: 湖北省枣阳市环城鲍庄村九组

联系电话: 13816672110

邮箱: wangyazhong@dahengagro.com

推荐用途: 镁质建材、土壤调理、肥料原料

禁止用途: 无特定限制（食品医药除外）

危险性概述

REACH: 氧化镁属于 REACH 注册豁免物质，不需要做 REACH 注册

GHS 分类: 不归类为危险化学品

主要危害:

- **粉尘吸入:** 粉尘刺激呼吸道、咽喉；长期大量吸入矿物粉尘有肺部刺激风险
- **眼接触:** 粉尘进入眼睛，产生刺激、干涩
- **皮肤接触:** 大量粉尘可造成皮肤干燥
- **特殊风险:** 高活性，接触水分会发生水化并释放热量，受潮后结块

警示词: 无

防范说明: 避免扬尘；佩戴防尘口罩、护目镜；保持包装密封干燥。

3. 成分

氧化镁 $MgO \geq 90.0\%$

活性氧化镁 $\geq 65\%$

氧化钙 $CaO \leq 2.5\%$

二氧化硅 $SiO_2 \leq 4.0\%$

三氧化二铁 $Fe_2O_3 \leq 1.0\%$

三氧化二铝 $Al_2O_3 \leq 1.0\%$

烧失量 $\leq 6.0\%$

说明: 菱镁矿煅烧混合物，含有天然矿物杂质

4. 急救措施

吸入: 移至空气新鲜处，如持续咳嗽不适就医。

皮肤接触: 清水冲洗皮肤。

眼睛接触: 大量清水冲洗眼睛至少 15 分钟，就医。

食入: 大量饮水，不要催吐，及时就医。

5. 消防措施 本品不可燃。

灭火介质: 水、干粉、二氧化碳。

特殊风险: 遇水发生水化放热，密闭大量受潮可升温。

防护: 消防员佩戴防尘呼吸器。

泄漏应急处理

少量泄漏: 清扫收集，避免扬尘。

大量泄漏: 隔离区域，防尘，收集入密封容器，不要直接喷水。禁止直接大量喷水（水化放热）。

操作处置与储存

操作：作业区域除尘，佩戴防尘口罩、护目镜，减少粉尘。

储存：密封，干燥仓库，防潮防水，严禁淋雨。远离水源，避免露天堆放。

接触控制 / 个体防护

职业接触限值：矿物粉尘 8h-TWA 4 mg/m³（呼吸性粉尘）

呼吸防护：粉尘大时佩戴 KN95 防尘口罩

眼睛防护：护目镜

皮肤防护：长袖工作服

手防护：橡胶手套

理化特性

外观：白色至浅米黄色粉末

分子式：MgO

分子量：40.31

熔点：2852℃

沸点：3600℃

堆积密度：0.4~0.8 g/cm³

pH（饱和悬浊液）：10~11

溶解性：几乎不溶于水，溶于稀酸

关键特性：高活性，极易吸潮，遇水发生水化放热反应

稳定性和反应性稳定性：

干燥状态稳定；遇水、湿气发生水化反应放热

避免接触：水、水汽、强酸不发生危险聚合。

毒理学信息

急性毒性 LD50（经口大鼠）>2000 mg/kg，低毒。

粉尘仅产生机械刺激，无急性中毒风险

生态学信息

对水生生物低毒；大量进入水体可提高PH值

土壤中可作为镁源，土壤改良用途合规。

废弃处置废弃物：

可以填埋，按一般工业固废处置

包装：清空后回收包装材料。

运输信息

联合国编号 UN：无

运输分类：不属于危险货物

包装：50kg内衬 PE 膜编织袋密封包装，1000kg吨包

运输要求：防雨、防潮，避免破损扬尘。

15. 法规信息

中国法规：GB/T16483-2008, GB/T17519-2013；GHS 分类；

HS 编码 2519903000 碱烧镁（轻烧镁），出口不受限制，只需办理常规出口报备手续，按票办理

16.其他信息

本 SDS 基于当前认知编制，产品为菱镁矿煅烧矿源性轻烧氧化镁，非化学合成氧化镁。

湖北达亨农业科技发展有限公司

Safety Data Sheet

English · Magnesium Oxide

SDS Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product Name: Magnesium Oxide

CAS No.: 1309-48-4 **EC No.:** 2151719 **HS Code:** 2519903000

Manufacturer / Supplier: Hubei Daheng Agricultural Science and Technology Development Co., Ltd.

Address: Group 9, Baozhuang Village, Huancheng Subdistrict, Zaoyang City, Hubei Province, P.R. China

Telephone: 13816672110

Email: HYPERLINK "mailto: wangyazhong@dahengagro.com" wangyazhong@dahengagro.com

Recommended Use: Magnesiumbased building materials, soil conditioner, raw material for fertilizers **Prohibited Use:** No specific restrictions (except food and pharmaceutical applications)

2. Hazards identification

REACH status: Magnesium oxide is exempted from REACH registration. **GHS Classification:** Not classified as hazardous chemical.

Main Hazards: Inhalation of dust: Dust irritates respiratory tract and throat; prolonged heavy inhalation of mineral dust may cause pulmonary irritation. Eye contact: Dust may cause eye irritation and dryness. Skin contact: Excessive dust may lead to skin dryness. Special hazard: High activity; hydration occurs with moisture and releases heat; caking may happen under humid conditions.

Signal Word: None **Precautionary Statements:** Avoid dust generation. Wear dustproof respirator and safety goggles. Keep package sealed and dry.

3. Composition / information on ingredients

Magnesium Oxide (MgO) $\geq 90.0\%$ Active Magnesium Oxide $\geq 65\%$ Calcium Oxide (CaO) $\leq 2.5\%$ Silicon Dioxide (SiO₂) $\leq 4.0\%$ Ferric Oxide (Fe₂O₃) $\leq 1.0\%$ Aluminium Oxide (Al₂O₃) $\leq 1.0\%$ Loss on Ignition $\leq 6.0\%$

Note: Mixture obtained from magnesite calcination, containing natural mineral impurities.

4. Firstaid measures

Inhalation: Remove victim to fresh air. Seek medical attention if cough or discomfort persists. **Skin contact:** Rinse skin with clean water. **Eye contact:** Flush eyes thoroughly with plenty of water for at least 15 minutes. Seek medical advice.

Ingestion: Give large quantity of water to drink. Do NOT induce vomiting. Seek medical treatment promptly.

5. Firefighting measures

Product is nonflammable. Suitable extinguishing media: Water, dry powder, carbon dioxide. Special hazards arising from the substance: Hydration and heat generation upon contact with water; temperature rise may occur when bulk material gets moist in confined space. Protective equipment for firefighters: Wear dustproof respirator.

6. Accidental release measures

Small spill: Sweep and collect material; avoid dust formation. **Large spill:** Isolate the area, suppress dust, collect into sealed containers. Do NOT spray large amount of water directly (risk of exothermic hydration).

7. Handling and storage

Handling: Provide local dust extraction at workplace. Wear dustproof respirator and safety goggles; minimise dust generation. **Storage:** Keep tightly sealed. Store in dry warehouse; protect from moisture and rainwater. Keep away from water sources; avoid openair stacking.

8. Exposure controls / personal protection

Occupational exposure limit: Mineral dust 8hTWA 4 mg/m³ (respirable dust).

Respiratory protection: Wear KN95 dustproof respirator under dusty conditions. **Eye protection:** Safety goggles. **Skin protection:** Longsleeve working clothes. **Hand protection:** Rubber gloves.

9. Physical and chemical properties

Appearance: White to pale beige powder **Molecular Formula:** MgO **Molecular Weight:** 40.31 **Melting Point:** 2852 °C **Boiling Point:** 3600 °C **Bulk Density:** 0.40.8 g/cm³ **pH (suspension saturated):** 1011 **Solubility:** Practically insoluble in water, soluble in dilute acids. **Key properties:** High activity, highly hygroscopic; exothermic hydration reaction occurs upon contact with water.

10. Stability and reactivity

Stability: Stable under dry conditions. Hydration with heat release when exposed to water or moisture. Conditions to avoid: Water, water vapour, strong acids. Hazardous polymerisation: Will not occur.

11. Toxicological information

Acute oral toxicity (rat LD₅₀) >2000 mg/kg, low toxicity. Dust causes only mechanical irritation; no risk of acute poisoning.

12. Ecological information

Low toxicity to aquatic organisms; large quantities entering water may raise pH value. Serves as magnesium source in soil; compliant for soil amendment applications.

13. Disposal considerations

Waste substance: Dispose as general industrial solid waste by landfilling. Packaging materials: Recycle emptied packages.

14. Transport information

UN Number: None Transport hazard classification: Non-hazardous goods. Packaging: 50kg Sealed woven bags with PE inner liner. 1000kg ton bag. Transport requirements: Keep from rain and moisture; prevent package damage and dust emission.

15. Regulatory information

Chinese regulations: GB/T164832008, GB/T175192013; GHS classification. HS Code 2519903000 Caustic magnesia (light-burned magnesia): Export is not restricted; a routine export filing procedure applies and is completed per shipment.

16. Other information

This SDS is compiled based on current available knowledge. The product is mineral-sourced light-burned magnesium oxide from magnesite calcination, not chemically synthesised magnesium oxide.

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Specification values are those of the factory technical data sheet and are subject to the certificate of analysis issued with each batch. HS commodity codes are quoted for guidance — confirm the applicable code for the declared product name and use with your customs broker.