



MAGNESIUM STEARATE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 16/01/2023 Revision date: 16/01/2023 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Substance
Substance name : MAGNESIUM STEARATE
EC-No. : 209-150-3
CAS-No. : 557-04-0
REACH registration No : not available
Synonyms : Octadecanoic acid, magnesium salt / Stearate, magnesium / Stearic acid, magnesium salt / Octadecanoic acid, magnesium salt (2:1) / Magnesium distearate / MAGNESIUM STEARATE / Salts of stearic acids with magnesium bases / Magnesium octadecanoate / Bis(octadecanoic acid)magnesium salt / Salt of stearic acid with magnesium base / Dioctadecanoate magnesium
Other means of identification : Octadecanoic acid, magnesium salt
Fatty acids, C16-18, magnesium salts (EC No. 209-150-3; 292-967-2/ CAS No. 557-04-0; 91031-63-9)

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Lubricant

1.3. Supplier

FACI ASIA PACIFIC PTE LTD
1 Merlimau Place, Jurong Island
Singapore 627862
Telephone No : (65) 6360 0300
Fax No : (65) 6360 0303
technicalservice@faci.it

1.4. Emergency telephone number

Emergency number : (65) 6360 0300
(business hours)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. GHS Label elements, including precautionary statements

GHS-US labelling
No labelling applicable

2.3. Other hazards which do not result in classification

other hazards which do not result in classification : May form combustible dust concentrations in air.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	GHS-US classification
MAGNESIUM STEARATE (Main constituent)	(CAS-No.) 557-04-0	100	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

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SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to uncontaminated area. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion : Get immediate medical advice/attention. Do not induce vomiting without medical advice.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after eye contact : Dusts are mechanical irritants.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : carbon dioxide (CO₂), water, dry chemical powder.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : Potential dust explosion hazard from airborne release. High concentrations of dust or fine particulate in enclosed spaces may represent a fire/explosion risk.
- Explosion hazard : Potential dust explosion hazard from airborne release. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- Reactivity : Stable under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Avoid generation of dust. Keep container tightly closed and away from heat, sparks and flame.
- Firefighting instructions : Move undamaged containers from immediate hazard area if it can be done safely. Stay upwind/keep distance from source.
- Protective equipment for firefighters : Use self-contained breathing apparatus and chemically protective clothing. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing. Wear recommended personal protective equipment.
- Emergency procedures : Avoid breathing dust. Immediately contact emergency personnel. Evacuate area.
- Measures in case of dust release : Mechanically ventilate the spillage area.

6.1.2. For emergency responders

- Protective equipment : In case of fire: Wear self-contained breathing apparatus. Wear suitable protective clothing. Wear recommended personal protective equipment.
- Emergency procedures : Evacuate and limit access. Take precautionary measures against static discharge. Avoid breathing dust. Material spilled on hard surface can present a serious slipping/falling hazard. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

6.2. Environmental precautions

Do not allow to enter into ground-water, surface water or drains.

6.3. Methods and material for containment and cleaning up

- For containment : Contain the spillage using bonding. For larger spills, dike area and pump into waste containers. Mechanically ventilate the spillage area. Use clean-up methods that avoid dust generation (vacuum wet).
- Methods for cleaning up : Avoid creating or spreading dust. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

6.4. Reference to other sections

For disposal of residues refer to section 13 : Disposal considerations.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Generation of airborne dust. Dust may form flammable and explosive mixture with air.
- Precautions for safe handling : Do not breathe dust. Use approved industrial vacuum cleaner for removal. Avoid raising powdered materials into airborne dust. Provide local exhaust or general room ventilation to minimize exposure to dust. Use grounded electrical/mechanical equipment. Use explosion-proof equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing prior to re-use. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a dry, cool area. Keep container tightly closed.
- Maximum storage period : 24 months
- Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.
- Special rules on packaging : Keep only in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

MAGNESIUM STEARATE (557-04-0)		
ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ STEARATES (EXCEPT STEARATES OF TOXIC METALS), RESPIRABLE FRACTION
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ STEARATES (EXCEPT STEARATES OF TOXIC METALS), INHALABLE FRACTION

8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide adequate ventilation to minimize dust concentrations. Either local exhaust or general room ventilation is usually required. A washing facility/water for eye and skin cleaning purposes should be present.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. In case of dust production: protective goggles. Protective clothing. Respiratory protection.

Materials for protective clothing:

In case of repeated or prolonged exposure use chemical resistant protective apron/clothing (tested and approved in accordance with OSHA requirements (29 CFR 1910.132) or equivalent.

Hand protection:

Use equipment for hand protection tested and approved in accordance with OSHA requirements (29 CFR 1910.138). Thickness of the glove material > 0.11 mm. Breakthrough time : > 480 min. Nitrile rubber

Eye protection:

In case of dust production: protective goggles. Use equipment for eye protection tested and approved in accordance with OSHA requirements (29 CFR 1910.133)

Skin and body protection:

Use chemically protective clothing. Chemical resistant safety shoes. (tested and approved in accordance with OSHA requirements (29 CFR 1910.132) or equivalent.

Respiratory protection:

Dust production: dust mask with filter type P2. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

Personal protective equipment symbol(s):



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: white
Odour	: Slightly fatty
Odour threshold	: No data available
pH	: 7 - 9 @ 20 °C, solution in water
Melting point	: 130 - 145 °C
Freezing point	: No data available
Boiling point	: not applicable
Flash point	: ≈ 190 °C C.O.C. method
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: not applicable
Relative density	: No data available
Density	: 1.095 g/cm ³ melted
Solubility	: Water: Insoluble Organic solvent: Partially soluble
Log Pow	: No data available
Auto-ignition temperature	: 410 °C
Decomposition temperature	: > 200 °C
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: Not explosive. Dust may form explosive mixture in air.
Oxidising properties	: Not oxidizing.

9.2. Other information

Bulk density	: 140 - 200 g/L
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Strong acids and oxidants.

10.6. Hazardous decomposition products

Thermal decomposition generates : Calcium oxides. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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LD50 oral rat	> 10 g/kg
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EN (English)

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Skin corrosion/irritation	: Not classified pH: 7 - 9 @ 20 °C, solution in water
Serious eye damage/irritation	: Not classified pH: 7 - 9 @ 20 °C, solution in water
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after eye contact	: Dusts are mechanical irritants.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

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Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

MAGNESIUM STEARATE (557-04-0)

Log Pow	No data available
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Can be deposited in landfills, sent to an incineration or other appropriate means of disposal provided they meet the requirements of local laws.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

MAGNESIUM STEARATE (557-04-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

MAGNESIUM STEARATE (557-04-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

MAGNESIUM STEARATE (557-04-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

MAGNESIUM STEARATE (557-04-0)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Abbreviations and acronyms:

	CLP - Classification, Labelling and Packaging
	REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
	SDS - Safety Data Sheet
	CSR - Chemical Safety Report
	Overland transport (ADR)
	CAS (Chemical Abstracts Service) number
	PBT - Persistent, Bioaccumulative and Toxic substance
	vPvB - Very Persistent and Very Bioaccumulative
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product