

【1. Chemical product and company identification】

Chemical substance name:	Magnesium stearate
Product name:	Daiwax M Daiwax MF Daiwax Mso Daiwax Mso2 Daiwax SM-10 Daiwax SMO Daiwax SMO-1 Daiwax SMO-11 Daiwax MS
Company name:	Dainichi Chemical Industry Co., Ltd.
Address:	7-3-4, Nakaishikiri-cho, Higashiosaka-shi, Osaka-fu, 579-8014, Japan
Associated department:	Technical department
Telephone number:	+81-72-985-1851
Emergency contact number:	+81-72-985-1851
FAX number:	+81-72-987-0170
Recommended use:	Additives for resin

【2. Hazards identification】

1. GHS classification

a. Physical hazards

Substances and mixture which, in contact with water, emit flammable gases:	Not applicable
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b. Health hazards

Acute toxicity (oral):	Classification not possible
Acute toxicity (dermal):	Classification not possible
Acute toxicity (gases):	Not classified
Acute toxicity (vapors):	Not classified
Acute toxicity (dusts and mists):	Classification not possible
Skin corrosion/irritation:	Category 3
Serious eye damage / eye irritation:	Category 2B
Respiratory sensitization:	Classification not possible
Skin sensitization:	Classification not possible
Germ cell mutagenicity:	Classification not possible
Carcinogenicity:	Classification not possible
Reproductive toxicity:	Classification not possible
STOT-single exposure:	Classification not possible
STOT-repeated exposure:	Classification not possible
Aspiration hazard:	Classification not possible

c. Environmental hazards

Acute aquatic hazard:	Classification not possible
Chronic aquatic hazard:	Classification not possible
Hazardous to the ozone layer:	Classification not possible

2. Label elements

Signal words:	Warning
Hazard pictogram:	Not available
Hazard statement	
H316:	Causes mild skin irritation.
H320:	Causes eye irritation.

Precautionary statement

Prevention

P264:

Wash eyes thoroughly after handling.

Response

P305+P351+P338:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313:

If eye irritation persists: Get medical advice/attention.

P332+P313:

If skin irritation occurs: Get medical advice/attention.

【3. Composition/Information on ingredients】

Substance/Mixture:

Substance

Chemical substance name:

Magnesium stearate (Fatty acids, C16-C18, magnesium

CAS number:

557-04-0(91031-63-9)

ENCS number:

(2)-611

EINECS number:

209-150-3

【4. First-aid measures】

IN EACH CASES OF FOLLOWING EMERGENCIES, VICTIMS SHOULD BE TREATED BY PARTICULAR FIRST-AID MEASURES AS FOLLOW

In eyes:

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical advice.

On skin:

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical advice, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Inhalation:

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical advice.

Ingestion:

If large amount is swallowed, get medical advice.

【5. Fire-fighting measures】

Suitable Extinguishing media:

Water spray, foam-extinguisher, powder-extinguisher and dry chemical

Inappropriate extinguishing media:

Straight stream water

Flammable properties:

Hazardous fume containing COX and NOX might be formed during combustion.

Special protective actions for fire-fighters:

Fire-fighters should wear an appropriate respiratory apparatus and protective clothes for chemical.

【6. Accidental release measures 】

Personal precautions:

Use proper protective equipment as indicated in Section 8.
Avoid direct contact with the spilled or leaked material.
Avoid inhaling this product in the air (Powder dust).
Evacuate the area if large amount of product is leaked.
Ventilate the area if necessary.

Methods and materials for containment and cleaning up:

Rake spills with a broom and collect it in appropriate container.
Store the container in a cool and dry place until it disposes.
Ventilate the area where this product was released.

Environmental precautions:

Avoid flowing out to the rivers, household drains and other environment.

【7. Handling and storage 】

Handling:

Refer to Section 8.
Wash hands carefully after handling this product.
Prohibit open flames while handling this product.
Use dust explosion-proof electrical equipment and light fixtures.
Avoid diffusion of this product to the air.

Storage:

Do not eat, drink or smoke while handling this product.
Store this product in well-ventilated, dry and cool place.
Please make sure that the storage is not close to open flames, sparks and heat.
Please make sure that the container of this product is tightly closed when store this product.
Please use antistatic containers.

【8. Exposure controls/Personal protection 】

Component Exposure Limit

ACGIH:

10mg/m³ TLV-TWA (Stearates)

Engineering controls:

Eye washer and safety shower should be placed in storages where this product is stored and in buildings where this product is handled.

Ventilation:

Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

Personal protective equipment

Hands:

Wear appropriate protective gloves.

Eyes:

Wear appropriate safety glasses.

Skin and Body:

Wear appropriate protective clothes.

Respiratory:

Wear air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter.

【9. Physical and chemical properties 】

Appearance:	White solid (powder)
Odor:	No data available
Odor threshold:	No data available
pH:	No data available
Melting point and freezing point:	120 - 160°C
Initial boiling point and boiling range:	No data available
Flash point (Open cup):	>200°C (>392°F)
Evaporation rate (Butyl acetate =1):	No data available
Flammability (solids, gas):	No data available
Explosive limits:	No data available
Vapor pressure:	No data available
Vapor density (Air =1):	No data available
Specific gravity or density:	1.03 g/cm ³
Solubility:	Poorly soluble in water
Partition coefficient: n-octanol/water:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

【10. Stability and reactivity 】

Reactivity:	Not in particular.
Chemical stability:	Stable in general condition.
Conditions to avoid:	Slightly flammable, avoid high temperature. High concentration dispersion in air might result in powder explosion.
Incompatible materials:	Not in particular.
Hazardous decomposition product:	This product will form hazardous fume of magnesium oxide, carbon oxide, and nitrogen oxide on heating or burning.
Possibility of hazardous reactions:	No data available

【11. Toxicological information 】

Acute toxicity (Oral):	No data available
Acute toxicity (Dermal):	No data available
Acute toxicity (Gases):	Not classified
Acute toxicity (Vapors):	Not classified
Acute toxicity (Dusts and mists):	No data available
Skin corrosion/irritation:	Based on NITE (2006), there is a possibility of skin irritation to human, therefore classified as "Category 3".
Serious eye damage / Eye irritation:	Based on NITE (2006), there is a possibility of eye irritation to human, therefore classified as "Category 2B".
Respiratory sensitization:	No data available
Skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
Component analysis - LD50/LC50:	No data available

Safety Data Sheet

Inhalation (Dust)

Acute exposure:

Inhalation of dust may cause mild irritation.
Excessive amounts may produce coughing and difficult breathing.

Chronic exposure:

Excessive inhalation may cause a progressive chemical pneumonitis.

【12. Ecological information】

Ecotoxicity

Aquatic ecotoxicity: No data available

Terrestrial ecotoxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Hazardous to the ozone layer: No data available

【13. Disposal considerations】

Do NOT dump this product in the environment or in the household waste. Before disposal or incineration, contents of this product should be neutralized or stabilized if it's possible.

Obey local/regional/national/international regulations about the disposal or the incineration of this product (both contents and containers).

【14. Transport information】

UN number: Not Applicable on UN classification

US DOT: No classification assigned

TDG: No classification assigned

ADR: No classification assigned

RID: No classification assigned

IATA: No classification assigned

ICAO: No classification assigned

IMDG: No classification assigned

Marine pollutant: Not applicable

Particular safety measures for transportation: Avoid damage to the container while loading this product.

Do not put heavy objects on top of this product.

Load carefully to prevent the collapse of cargo.

Avoid direct sunlight to this product during transport.

【15. Regulatory information】

Inventory information

Inventory Name	Magnesium stearate	
	Status	Registry Number
AICS (Australia):	Present	—
DSL (Canada):	Present	—
IECSC (China):	Present	30034
EINECS (EU):	Present	209-150-3
ENCS (Japan):	Present	(2)-611
KECL (Korea):	Present	KE-26390
INSQ (Mexico):	Present	—
NZIoC (New Zealand):	Present	—
PICCS (Philippines):	Present	—
TCSI (Taiwan):	Present	—
Inventory (Turkey):	Present	EC No. 209-150-3
TSCA (U.S.A.):	Present	—

【16. Other Information】

References

- 1 ChemADVISOR, Inc. (2014). *Magnesium stearate* [Data file]. Retrieved from LOLI database.
- 2 ChemADVISOR, Inc. (2014). *Fatty acids, C16-18, magnesium salts* [Data file]. Retrieved from LOLI database.
- 3 IUCLID. (2000). *Dataset for fatty acids, C16-18, magnesium salts* [Data file].
- 4 National Institute of Technology and Evaluation (NITE). (2006). *Magnesium stearate* [Data file].
- 5 National Institute of Technology and Evaluation (NITE). (2006). *Classification result e(ID801-900)* [Data file]. Retrieved from [http://www.safe.nite.go.jp/english/files/ghs_xls/classification_result_e\(ID801-900\).xls](http://www.safe.nite.go.jp/english/files/ghs_xls/classification_result_e(ID801-900).xls).
- 6 United Nations. (2013). *Globally Harmonized System of Classification and Labelling of Chemicals (GHS)* (5th ed.). (The Japanese GHS Inter-ministerial Committee, Trans.). Tokyo: The Chemical Daily Co., Ltd..

Key/ Legend

ACGIH - American Conference of Governmental Industrial Hygienists

AICS - Australia Inventory of Chemical Substances
ADR - European Road Transport
°C - degree Celsius
EINECS - European Inventory of Existing Commercial Chemical Substances (European Union)
ENCS - Existing and New Chemical Substances (Japan)
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
HPV - High Production Volume
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
IECSC - Inventory of Existing Chemical Substances (China)
IMDG - International Maritime Dangerous Goods
INSQ - National Inventory of Chemical Substances (Mexico)
IUCLID - International Uniform Chemical Information Database
KECL - Korea Existing Chemicals Inventory
LD50 - Lethal Dose, 50% or Median Lethal Dose
LOLI - List Of Lists™-ChemADVISOR's Regulatory Database
NZIoC - New Zealand Inventory of Chemicals
PICCS - Philippines Inventory of Chemicals and Chemical Substances
RTECS - Registry of Toxic Effects of Chemical Substances®
RID - European Rail Transport
TDG - Transportation of Dangerous Goods
TSCA - Toxic Substances Control Act (U.S.A.)
UN - United Nations
CAS - Chemical Abstracts Service
DSL - Domestic Substances List
HS code - Harmonized System code
NITE - National Institute of Technology and Evaluation
STOT - Specific Target Organ Toxicity
TLV - Threshold Limit Value
TWA - Time Weighted Average
US DOT - United States Department of Transportation

Manufacture disclaimer

All information given in this SDS is based on the data which is considered to be accurate, but the information do not guarantee enough safety. All chemical material may have an unknown hazard to human and conditions of methods of handling, storage, use and disposal of the product are beyond suppliers' control; therefore all risks and consequences of use the product are on users' responsibilities and users need to set appropriate safety measures for special use.

In addition, all classification in this SDS was written in accordance with the GHS classification of the fifth revised edition. However, GHS mentioned that countries are free to determine which of the building blocks will be applied in different parts of label elements and building blocks. Therefore, many countries set own requirements of label elements and building blocks. In the cases of export from Japan or use in other countries, SDSs and labels are needed, which are in accordance with the local laws and regulations of exporting countries or user countries. Please contact supplier beforehand for checking SDSs and labels are suitable for the local laws and regulations.