Safety Data Sheet

【1. Chemical product and company identification 】

Chemical substance name:	Sodium stearate (C16-C18 fatty acid, sodium salt)
Product name:	Sodium stearate
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

Explosive:	Not applicable
Flammable gases:	Not applicable
Aerosols:	Not applicable
Oxidizing gases:	Not applicable
Gases under pressure:	Not applicable
Flammable liquid:	Not applicable
Flammable solids:	Classification not possible
Self-reactive substances and mixture:	Not applicable
Pyrophoric liquids:	Not applicable
Pyrophoric solids:	Not classified
Self-heating substances and mixtures:	Classification not possible
Substances and mixture which, in contact with water, emit flammable gases:	Not classified
Oxidizing liquids:	Not applicable
Oxidizing solids:	Not applicable
Organic peroxides:	Not applicable
Corrosive to metals:	Classification not possible

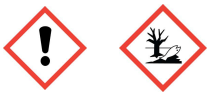
b. Health hazards

Acute toxicity (oral):	Classification not possible
Acute toxicity (dermal):	Classification not possible
Acute toxicity (gases):	Not applicable
Acute toxicity (vapors):	Classification not possible
Acute toxicity (dusts and mists):	Classification not possible
Skin corrosion/irritation:	Not classified
Serious eye damage / eye irritation:	Category 2
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:	Category 2
Chronic aquatic hazard:	Category 3
Hazardous to the ozone layer:	Classification not possible

2. Label elements

Signal words:	WARNING
Hazard pictogram:	
Hazard statement	Causes serious eye irritation Toxic to aquatic life Harmful to aquatic life with long lasting effects
Precautionary statement	
Prevention:	Read SDS carefully before handling this product. Avoid dispersing this product to air (powder dust). Avoid high conc. of dust in air to prevent dust explosion. Wash hand/eye thouroughly after handling. Wear protective gloves/protective clothes/eye protection/face protection. Avoid release to the environment.
Response:	
If in eye:	Rinse cautiously with water for several miniutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion:	If large amount is swallowed, get medical attention.
Disposal:	Dispose of contents/container in accordance with local/regional/national/international regulations

【3. Composition/Information on ingredients 】

Substance/Mixture:	Substance
Chemical substance name:	Sodium stearate (C16-C18 fatty acid, sodium salt)
CAS number:	822-16-2(68424-38-4)

【4. First-aid measures 】

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

If in eye:	Rinse cautiously with water for several miniutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
On skin:	Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation occurs, get medical advice/attention.
Inhalation:	Remove person to fresh air and keep comfortable for breathing. Get medical advice/attentionn if you feel unwell.
Ingestion:	Rinse mouth. If large amount is swallowed, get medical attention.

【5. Fire-fighting measures 】

Flash point:	No data available
Lower explosive limit (In the air):	No data available
Upper explosive limit (In the air):	No data available
Suitable Extinguishing media:	Water spray, foam-extinguisher, powder-extinguisher and dry chemical

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Inappropriate extinguishing media: Straight stream water

Flammable properties: Slight hazardous.
Dust/air mixtures may ignite or explode.

Special protective actions for fire-fighters: Remove product containers from fire area if possible.
Keep cooling containers with water after fire extinction.
Fire-fighters should wear appropriate respiratory apparatus and chemical protective clothes.

【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).

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: Avoid contact with eyes, skin and clothes.
Avoid inhaling this product in air (Powder dust).
Wash hands thoroughly after handling this product.
Prohibit open flames while handling this product.
Use dust explosion-proof electrical equipment and light fixtures.
Avoid dispersing of this product to the air.
Do not eat, drink or smoke while handling this product.

Storage: Store this product in well-ventilated, dry and cool place.
Make sure that the storage area is away from open flames, sparks and heat. Make sure that the container of this product is tightly closed.

【8. Exposure controls/Personal protection 】

Component Exposure Limit

JSOH: 8 mg/m3 TWA total dust; 2 mg/m3 TWA respirable dust

ACGIH: 10 mg/m3 TWA total dust; 3 mg/m3 TWA respirable dust

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 particular filter.

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【9. Physical and chemical properties 】

Appearance:	White to yellowish white powder
Odor:	No data available
Odor threshold:	No data available
pH:	No data available
Melting point and freezing point:	210 ～ 230℃
Initial boiling point and boiling range:	Not applicable
Flash point (Open cup):	No data available
Evaporation rate (Butyl acetate =1):	Not applicable
Flammability (solids, gas):	No data available
Lower explosive limits:	No data available
Upper explosive limits:	No data available
Vapor pressure:	No data available
Vapor density (Air =1):	No data available
Specific gravity or density:	0.20 ～ 0.40 g/ml
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Not applicable

【10. Stability and reactivity 】

Reactivity:	Nothing in particular.
Chemical stability:	Stable in room temperature and pressure.
Conditions to avoid:	Avoid contact with incompatible materials. Avoid heat, flames, sparks and other sources of ignition. If dry, it can be charged electrostatically by swirling, pneumatic transport, pouring, etc.
Incompatible materials:	Acids, Bases, Oxidizing materials
Hazardous decomposition product:	Hazadous gas, COX and NOX etc. might form during decomposition.
Possibility of hazardous reactions:	
Heating or combustion reaction:	Hazardous This product will form hazardous fume of oxides of aluminium and carbon on heating or burning.

【11. Toxicological information 】

Acute toxicity (Oral):	No data available
Acute toxicity (Dermal):	No data available
Acute toxicity (Gases):	Not applicable
Acute toxicity (Vapors):	No data available
Acute toxicity (Dusts and mists):	No data available
Skin corrosion/irritation:	Based on the statement that there is no irritation with the rabbit (ACGUH(2001)), it was carried out the outside of
Serious eye damage / Eye irritation:	Based on the statement that in the rabbit test, transient mild conjunctival hyperemia, and optical irregularities of the corneal epithlium were seen, and moderate irritations is indiciated (HSDB(2005)), it was set as Category 2A.
Respiratory sensitization:	No data available
Skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available

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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
RTECE acute toxicity:	No data available
Inhalation (Dust):	No data available
Skin contact	
Acute exposure:	No data available
Chronic exposure:	No data available
Eye contact	
Acute exposure:	No data available
Chronic exposure:	No data available
Ingestion	
Acute exposure:	No data available
Chronic exposure:	No data available

【12. Ecological information】

Hazardous to the aquatic environment:

short-term (acute) hazard:	Since a potential that relevant toxicity was indicated in the water solubility (3.322 mg/L (PHYSPROP Database, 2005)) of this substance could not be denied from 48-hour EC50=19 mg/L of Crustacea (Daphnia Magna)(MOE eco-toxicity tests of chemicals, 2000)), it was classified into Category 2.
long-term (acute) hazard:	Classified into Category 2, since acute toxicity was Category 2 and supposed bio-accumulative (log Kow = 4.13 (PHYSPROP Database, 2005), though rapidly degrading (BOD: 83% (Existing Chemicals Safety Check Data)).
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Hazardous to the ozone layer:	No data available

【13. Disposal considerations】

Do NOT dispose of this product directly into the environment or the household drainage system. 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	Sodium stearate		C16-C18 fatty acid, sodium salt	
	Status	Registry Number	Status	Registry Number
AICS (Australia):	Present	—	Present	—
DSL(Canada):	Present	—	—	—
NDSL(Canada):	—	—	Present	—
IECSC (China):	Present	30035	Present	41779
EINECS (EU):	Present	212-490-5	Present	270-299-2
ENCS (Japan):	Present	(2)-611	—	—
KECL (Korea):	Present	KE-26415	Present	KE-15224
NZIoC (New Zealand):	Present	—	Present	—
PICCS (Philippines):	Present	—	Present	—
TSCA (U.S.A.):	Present	—	Present	—

【16. Other Information 】

Manufacturer information

Manufacturer name: Formosa Organic Chemical Industry Co., Ltd.
Address: 575 Soi 11 Pattana 1 Road, Bangpoo Industrial Estate, Praeksa, Amper Muang, Samutprakarn, 10280, Thailand
Telephone number: +66 2709 3016-9
Emergency contact number: +66 2709 3016-9
FAX number: +66 2324 0353

References

1 **National Institute of Technology and Evaluation (NITE). (Accessed on 2018).**
2 **LOLI (ChemADVISOR, 2013)**
3 **ezADVANCE (JCDB, 2013)**
4 **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
CAS - Chemical Abstracts Service
℃ - degree Celsius
DSL - Domestic Substances List
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
HS code - Harmonized System code
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
NITE - National Institute of Technology and Evaluation
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
STOT - Specific Target Organ Toxicity
TDG - Transportation of Dangerous Goods
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act (U.S.A.)
TWA - Time Weighted Average
UN - United Nations
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.