

## 【1. Chemical product and company identification】

<b>Chemical substance name:</b>	Calcium stearate (Fatty acids, C16-18, calcium salts)		
<b>Product name:</b>			
Daiwax C	Daiwax Cso	Daiwax C-40P	Daiwax CA
Daiwax CS-8	Daiwax CS-55	Daiwax CS-75	Daiwax CSA
<b>Company name:</b>	Dainichi Chemical Industry Co., Ltd.		
<b>Address:</b>	7-3-4, Nakaishikiri-cho, Higashiosaka-shi, Osaka-fu, 579-8014, Japan		
<b>Associated department:</b>	Technical department		
<b>Telephone number:</b>	+81-72-985-1851		
<b>Emergency contact number:</b>	+81-72-985-1851		
<b>FAX number:</b>	+81-72-987-0170		
<b>Recommended use:</b>	Additives for resin		

## 【2. Hazards identification】

### 1. GHS classification

#### a. Physical hazards

<b>Flammable solids:</b>	Classification not possible
<b>Pyrophoric solids:</b>	Classification not possible
<b>Self-heating substances and mixtures:</b>	Classification not possible
<b>Corrosive to metals:</b>	Classification not possible

#### b. Health hazards

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

#### c. Environmental hazards

<b>Acute aquatic hazard:</b>	Classification not possible
<b>Chronic aquatic hazard:</b>	Classification not possible
<b>Hazardous to the ozone layer:</b>	Not applicable

### 2. Label elements

<b>Signal words:</b>	Not available
<b>Hazard pictogram:</b>	Not available
<b>Hazard statement</b>	Not available
<b>Precautionary statement</b>	Not available

### **【3. Composition/Information on ingredients 】**

<b>Substance/Mixture:</b>	Substance
<b>Chemical substance name:</b>	Calcium stearate (Fatty acids, C16-18, calcium salts)
<b>Synonym:</b>	Octadecanoic acid, calcium salt
<b>CAS number:</b>	1592-23-0 (85251-71-4)
<b>ENCS number:</b>	(2)-611
<b>EINECS number:</b>	216-472-8 (286-484-6)
<b>KECL number:</b>	KE-26347

### **【4. First-aid measures 】**

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

<b>In eyes:</b>	Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical advice.
<b>On skin:</b>	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.
<b>Inhalation:</b>	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.
<b>Ingestion:</b>	If large amount is swallowed, get medical advice.

### **【5. Fire-fighting measures 】**

<b>Suitable Extinguishing media:</b>	Water spray, foam-extinguisher, powder-extinguisher and dry chemical
<b>Inappropriate extinguishing media:</b>	Straight stream water
<b>Flammable properties:</b>	Hazardous fume containing COX and NOX might be formed during combustion.
<b>Special protective actions for fire-fighters:</b>	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.  
Do not eat, drink or smoke while handling this product.

### **Storage:**

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/m<sup>3</sup> 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 particular filter.

## **【9. Physical and chemical properties 】**

**Appearance:**

White solid (powder, granule, flake, etc.)

**Odor:**

No data available

**Odor threshold:**

No data available

**pH:**

No data available

**Melting point and freezing point:**

135 - 155°C

**Initial boiling point and boiling range:**

No data available

**Flash point (Open cup):**

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:**

1.03 g/cm<sup>3</sup>

**Solubility:**

Poorly soluble in water

**Partition coefficient: n-octanol/water:**

No data available

**Auto-ignition temperature:**

460°C (860°F)

**Decomposition temperature:**

No data available

**Viscosity:**

No data available

## **【10. Stability and reactivity】**

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

## **【11. Toxicological information】**

<b>Acute toxicity (Oral):</b>	Based on IUCLID (2000), Oral Rat LD50 is larger than 10000mg/kg, therefore classified as "Not classified".
<b>Acute toxicity (Dermal):</b>	No data available
<b>Acute toxicity (Gases):</b>	Not applicable
<b>Acute toxicity (Vapors):</b>	No data available
<b>Acute toxicity (Dusts and mists):</b>	No data available
<b>Skin corrosion/irritation:</b>	No data available
<b>Serious eye damage / Eye irritation:</b>	No data available
<b>Respiratory sensitization:</b>	No data available
<b>Skin sensitization:</b>	No data available
<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	No data available
<b>Reproductive toxicity:</b>	No data available
<b>STOT-single exposure:</b>	No data available
<b>STOT-repeated exposure:</b>	No data available
<b>Aspiration hazard:</b>	No data available
<b>Component analysis - LD50/LC50:</b>	Oral LD50 Rat > 10000mg/kg
<b>Inhalation (Dust)</b>	
<b>Acute exposure:</b>	Inhalation of dust may cause irritation and congestion of the respiratory tract.
<b>Chronic exposure:</b>	Excessive inhalation may cause a progressive chemical pneumo-

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## **【12. Ecological information】**

### **Ecotoxicity**

<b>Aquatic ecotoxicity:</b>	No data available
<b>Terrestrial ecotoxicity:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Mobility in soil:</b>	No data available
<b>Hazardous to the ozone layer:</b>	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】**

<b>UN number:</b>	Not Applicable on UN classification
<b>HS code:</b>	2915.70
<b>US DOT:</b>	No classification assigned
<b>TDG:</b>	No classification assigned
<b>ADR:</b>	No classification assigned
<b>RID:</b>	No classification assigned
<b>IATA:</b>	No classification assigned
<b>ICAO:</b>	No classification assigned
<b>IMDG:</b>	No classification assigned
<b>Marine pollutant:</b>	Not applicable
<b>Particular safety measures for transportation:</b>	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	Calcium stearate		Fatty acids, C16-18, calcium salts	
	Status	Registry Number	Status	Registry Number
AICS (Australia):	Present	—	Unlisted	—
DSL (Canada):	Present	—	Unlisted	—
IECSC (China):	Present	30026	Present	41726
EINECS (EU):	Present	216-472-8	Present	286-484-6
ENCS (Japan):	Present	(9)-1677, (2)-611	Present	(2)-611
KECL (Korea):	Present	KE-26347	Unlisted	—
INSQ (Mexico):	Present	—	Unlisted	—
NZIoC (New Zealand):	Present	—	Present	—
PICCS (Philippines):	Present	—	Unlisted	—
HPV Chemicals (Turkey):	Present	216-472-8	Present	286-484-6
Inventory (Turkey):	Present	EC No. 216-472-8	Present	EC No. 286-484-6
TSCA (U.S.A.):	Present	—	Unlisted	—

## 【16. Other Information】

### References

- 1 ChemADVISOR, Inc. (2014). *Calcium stearate* [Data file]. Retrieved from LOLI database.
- 2 ChemADVISOR, Inc. (2014). *Fatty acids, C16-18, calcium salts* [Data file]. Retrieved from LOLI database.
- 3 IUCLID. (2000). *Dataset for calcium stearate* [Data file].
- 4 IUCLID. (2000). *Dataset for fatty acids, C16-18, calcium salts* [Data file].
- 5 National Institute of Technology and Evaluation (NITE). (2006). *Calcium stearate* [Data file].
- 6 National Institute of Technology and Evaluation (NITE). (2006). *Fatty acids, C16-18, calcium salts* [Data file].
- 7 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..

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## 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.*