

## Safety Data Sheet

### 1. Product and company identification

Product name : Calcium fluoride  
 Name of manufacturer : KANTO CHEMICAL CO., INC.  
 Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan  
 Name of section : Reagent division, catalog and products information section  
 Telephone number : +81-3-6214-1090  
 Facsimile number : +81-3-3241-1047  
 Mail address : BC32@gms.kanto.co.jp  
 SDS No. : 07065  
 Product numbers applied by the SDS  
     : 07065, 08367

### 2. Summary of danger and Hazard

#### GHS classification

##### Physical and chemical hazard

Flammable solids : Out of category  
 Pyrophoric solids : Out of category  
 Self-heating substances and mixtures  
     : Out of category  
 Substances and mixtures which, in contact with water, emit flammable gases  
     : Out of category

##### Human health hazard

Acute toxicity(oral) : Out of category

Skin corrosion/irritation  
     : Out of category

Serious eye damage/eye irritation

    : Category 2B

Specific target organ systemic toxicity(single exposure)

    : Category 3 (respiratory tract irritation)

#### Pictogram or symbol



Signal word : Warning

Hazard statement : Causes eye irritation  
                   May cause respiratory irritation

#### Cautions

Safety measurements : Avoid breathing dust, mist, and vapor.  
                   Use only in a well-ventilated area.

First-aid measures : If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical treatment if you feel unwell.

If in eyes : Rinse cautiously with water for several minutes. Get medical treatment.

If on skin : Remove contaminated clothing and the substance. Get medical treatment, if you feel unwell.

Wash hands thoroughly after handling.

Storage : Tightly container closed and store in a well-ventilated area.

Store locked up.

Disposal : Dispose of contents and containers appropriately in accordance with related regulations.

### 3. Composition/Information on ingredients

Substance/Mixture : Substance

Chemical name or commercial name : Calcium fluoride

Ingredients and composition : Calcium fluoride min. 97.0%

Chemical formula : CaF<sub>2</sub>

CAS No. : 7789-75-5

TSCA Inventory : Registered

EINECS No. : 2321887

### 4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.

Skin contact : Wash the affected areas under running water.

Eye contact : Wash the affected areas under running water.

Ingestion : Give the victim water. If necessary, get medical attention.

### 5. Fire fighting measures

Extinguishing media : This product is noncombustible.

Prohibited extinguishing media

: None

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Protection for firefighters

: Firefighters should wear protective equipment.

### 6. Accidental release measures

Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of dust. Keep away personnel except for authorized ones from spillage area by stretching ropes.



**Cautions for environment** : Attention should be given not to cause damage to the environment by flowing of spillage to rivers. In case of the dilution of copious water, do not cause damage to the environment by untreated wastewater.

**Removal measure** : Sweep up the chemical and place in a chemical waste container.

## 7. Cautions of handling and storage

### Handling

**Engineering measures** : If necessary, wear proper protective equipment not to contact with skin or inhale the dust.

### Cautions for safety handling

: Use with an enclosed system or a local exhaust ventilation.

### Storage

#### Adequate storage condition

: Store in a dark, cool place and tightly closed.

#### Safety adequate container materials

: Glass, polyethylene, polypropylene

## 8. Exposure control/Personal protection

### Control parameters

ACGIH(2015) : 2.5mg/m<sup>3</sup> (as Fluoride) (TLV-TWA)

### Protective equipment

#### Respiration protective equipment

: If necessary, wear dust mask

#### Hands protective equipment

: Impervious protective gloves

#### Eyes protective equipment

: Safety goggles

## 9. Physical and chemical properties

Appearance : Powder

Color : White

Odor : Odorless

Boiling point : 2500°C

Melting point : 1360°C

Flash point : Noncombustible

Density : 3.18g/cm<sup>3</sup> (20°C)

### Solubility

Solubility in solvents : Water : 0.0016g/water 100mL

## 10. Stability and reactivity

Stability : Stable under normal usage.

Reactivity : Dissolves slightly in diluted acids. Reacts with sulfuric acid and forms hydrogen fluoride.

Incompatible conditions : Light, heat

Incompatible materials : Acids

## 11. Toxicological information

Acute toxicity : Oral : Out of category  
 Dermal : Not possible to classify because of insufficient data.  
 Inhalation(vapor) : Not possible to classify because of insufficient data.  
 Inhalation(dust, mist) : Not possible to classify because of insufficient data.  
 rat oral LD50=4250mg/kg

Skin corrosiveness/irritation : Out of category  
 Since the substance causes mild irritation to the skin, it was classified into out of category.

Serious eye damage/eye irritation : Causes eye irritation(category 2B)  
 The substance has eyes irritation as fluorine compounds, it was classified into category 2B.

Respiratory sensitization or Skin sensitization : Respiratory sensitization : Not possible to classify because of insufficient data.  
 Skin sensitization : Not possible to classify because of insufficient data.

Mutagenicity : Not possible to classify because of insufficient data.

Carcinogenic effects : Not possible to classify because of insufficient data  
 ACGIH classifies it as the group A4(not classifiable as a human carcinogen).

Effects on the reproductive system : Not possible to classify because of insufficient data.

Specific target organ systemic toxicity single exposure : May cause respiratory irritation(category 3)  
 Since exposure of fluorine compounds may causes respiratory irritation, the product was classified into category 3 (respiratory irritation).

Specific target organ systemic toxicity repeated exposure : Not possible to classify because of insufficient data.

Aspiration hazard : Not possible to classify because of insufficient data.

## 12. Ecological information

### Ecotoxicity

Fish toxicity : Not available

### Persistence and degradability

: Not available

Bioaccumulative potential : Not available

## 13. Disposal consideration

Residual disposal : Bury in a landfill site approved for the disposal of chemical and hazardous wastes. Or entrust approved waste disposal companies with the disposal.

Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

#### 14. Transport information

UN class : It is not regulated under UN regulations.

#### 15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

#### 16. Other information

References Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd. (1963)

Dangerous Properties of Industrial Materials, 6th ed. N. I. Sax Van Nostrand Reinhold Company (1984)

Handbook of 16817 Chemical Products, The Chemical Daily Co. (2017)

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product. The Safety Data Sheet (SDS) is prepared based on JIS Z7253, and it has the same required elements on the Material Safety Data Sheet (MSDS) which is prepared based on JIS Z7250:2010.