# **SAFETY DATA SHEETS**

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

Creation Date: Aug 17, 2017

Revision Date: Aug 17, 2017

1.Identification

1.1GHS Product identifier

Product name Lithium fluoride

1.2Other means of identification

Product number -

Other names Lithiumfluorid

1.3Recommended use of the chemical and restrictions on use

Identified uses

For industry use only.

Uses advised

no data available

against

1.4Supplier's details

Company chemicalbook

Address 珠江摩尔大厦 3 号楼

Telephone 400-158-6606 Fax 86-10-69703845

1.5Emergency phone number

Emergency phone

number

Service hours Monday to Friday, 9am-5pm (Standard time zone:

UTC/GMT +8 hours).

# 2.Hazard identification

#### 2.1Classification of the substance or mixture

Acute toxicity - Oral, Category 3

Skin irritation, Category 2

Eye irritation, Category 2

Specific target organ toxicity – single exposure, Category 3

## 2.2GHS label elements, including precautionary statements

Pictogram(s)

Signal word Danger

Hazard statement(s)H301 Toxic if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

# Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing

dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated

area.

Response

P301+P310 IF SWALLOWED: Immediately call a

POISON CENTER/doctor/...

P321 Specific treatment (see ... on this label).

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor/ $\cdots$ if you feel

unwell.

Storage

P405 Store locked up.

P403+P233 Store in a well-ventilated place.

Keep container tightly closed.

Disposal

P501 Dispose of contents/container to ...

2.3Other hazards which do not result in classification

none

3. Composition/information on ingredients

3.1Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Lithium	Lithium fluoride	7780-24-4	none	100%
fluoride	Lithium liuoliue	1103 24 4	попе	100%

#### 4.First-aid measures

#### 4.1Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2Most important symptoms/effects, acute and delayed

no data available

#### 4.3Indication of immediate medical attention and special treatment needed, if necessary

Basic treatment: Establish a patent airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary ... . Monitor for shock and treat if necessary ... . For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during treatment ... . Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool ... . Cover skin burns with dry sterile dressings after decontamination ... . /Lithium and related compounds/

# 5.Fire-fighting measures

### 5.1Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2Specific hazards arising from the chemical

no data available

#### 5.3Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6.Accidental release measures

# ${\bf 6.1 Personal\ precautions,\ protective\ equipment\ and\ emergency\ procedures}$

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### 6.2Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# ${\bf 6.3 Methods\ and\ materials\ for\ containment\ and\ cleaning\ up}$

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. Handling and storage

#### 7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

#### 8.Exposure controls/personal protection

#### 8.1Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

#### 8.2Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 8.3Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

# 9.Physical and chemical properties

Physical state colorless or white solid

Colour Cubic crystals (NaCl lattice) or white fluffy

powder

Odour no data available

Melting point/ 845°C

freezing point

Boiling point or 1673° C/latm(lit.)

initial boiling point and boiling

range

Flammability no data available

Lower and upper no data available

explosion limit /
flammability limit

Flash point 1680° C

Auto-ignition no data available

temperature

Decomposition no data available

temperature

pH no data available Kinematic viscosityno data available

Solubility In water: 0.29 g/100 mL (20 °C)

Partition no data available

coefficient
n-octanol/water
(log value)

Vapour pressure 1 mm Hg at 1047° C Density and/or 2.64g/mLat 25° C(1it.)

relative density

Relative vapour no data available

density

Particle no data available

characteristics

# 10.Stability and reactivity

## 10.1Reactivity

no data available

## 10.2Chemical stability

Stable under recommended storage conditions.

#### 10.3Possibility of hazardous reactions

no data available

## 10.4Conditions to avoid

no data available

#### 10.5Incompatible materials

no data available

# 10.6Hazardous decomposition products

When heated to decomposition it emits toxic fumes of /fluoride/.

# 11.Toxicological information

#### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

# Skin corrosion/irritation

no data available

Serious eye damage/irritation				
no data available				
Respiratory or 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				
12.Ecological information				
12.1Toxicity				
Toxicity to fish: no data available				
Toxicity to daphnia and other aquatic invertebrates: no data available				
Toxicity to algae: no data available				
Toxicity to microorganisms: no data available				
12.2Persistence and degradability				
no data available				
12.3Bioaccumulative potential				
no data available				
12.4Mobility in soil				
no data available				
12.5Other adverse effects				
no data available				

# 13.Disposal considerations

# 13.1Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# 14.Transport information

14.1UN Number

ADR/RID: UN3288 IMDG: UN3288 IATA: UN3288

14.2UN Proper Shipping Name

ADR/RID: TOXIC SOLID, INORGANIC, N.O.S. IMDG: TOXIC SOLID, INORGANIC, N.O.S. IATA: TOXIC SOLID, INORGANIC, N.O.S.

14.3Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4Packing group, if applicable

ADR/RID: III IMDG: III IATA: III

14.5Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6Special precautions for user

no data available

14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

#### 15.Regulatory information

# 15.1Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC	
			number	
Lithium fluoride	Lithium fluoride	7789-24-4	none	
European Inventory of Existing Commercial Chemical Substances (EINECS)				
EC Inventory				
United States Toxic Substances Control Act (TSCA)				
Inventory				
China Catalog of Hazardous chemicals 2015				
New Zealand Inventory of Chemicals (NZIoC)				
Philippines Inventory of Chemicals and Chemical Substances (PICCS)				
Vietnam National Chemical Inventory				
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)				

### 16.Other information

Information on revision

Creation Date Aug 17, 2017 Revision Date Aug 17, 2017

Abbreviations and acronyms

CAS: Chemical Abstracts Service

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%