

## 1. Identification of the substance/preparation and of the company/undertaking

### *Identification of the product*

Lithium fluoride

### *Manufacturer/supplier identification*

Company: Guangdong Guanghua Sci-Tech Co.,Ltd

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## 2. Hazards identification

### **Classification of the substance or mixture**

#### **Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Acute toxicity, Oral (Category 3)

Skin corrosion / irritation (category 2)

Serious eye damage / eye irritation (Category 2A)

Specific target organ toxicity (single exposure) (Category 3), Respiratory system

### **Label elements**

Pictogram



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)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or with adequate ventilation.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301 + P310 + P330 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.  
P337 + P313 If eye irritation persists: Get medical advice/attention.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements  
none

### 3. Composition/information on ingredients

*Synonyms*

Lithium fluoride

CAS-No.: 7789-24-4

*M*: 25.94 g/mol

Molecular formula: LiF

### 4. First aid measures

**If inhaled**

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

**In case of skin contact**

Take off contaminated clothing and shoes immediately. 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**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. Fire-fighting measures

**Suitable extinguishing media**

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

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

### 6. Accidental release measures

**Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

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

**Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 7. Handling and storage

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.  
Absorbs carbon dioxide (CO<sub>2</sub>) from air.

### 8. Exposure controls and personal protection

**Appropriate engineering controls**

General industrial hygiene practice.

**Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

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.

**Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

**9. Physical and chemical properties**

**Form:** crystallization or powder

**Colour:** white

**Odour:** not available

**pH value:** 7.0~8.5

**Melting point:** 845°C

**Boiling point:** 1673°C

**Ignition temperature:** not available

**Flash point:** not available

**Autoignition temperature:** not available

**Explosion limits**

**lower:** not available

**upper:** not available

**Density :** 2.63 g/cm<sup>3</sup>

**Bulk density:** not available

**Solubility in**

**water (20 °C) :** slightly soluble in water

**diluted acids (20 °C) :** not available

**Thermal decomposition:** not available

**10. Stability and reactivity****Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid**

No data available

**Materials to avoid**

Strong oxidizing agents, Strong acid

**Hazardous decomposition products**

Other decomposition products - no data available

**11. Toxicological information****Acute toxicity**

LD50 Oral - Rat 143 mg/kg

**Skin corrosion or irritation**

no data available

**Serious eye damage or eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**12. Ecological information****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**13. Disposal considerations****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**14. Transport information****ADR/RID**

UN-Number: 3288 Class: 6.1 Packing group: III

Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Lithium fluoride)



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**IMDG**

UN-Number: 3288 Class: 6.1 Packing group: III  
Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Lithium fluoride)  
Marine pollutant: no

**IATA**

UN-Number: 3288 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solid, inorganic, n.o.s. (Lithium fluoride)

**15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**16. Other information**

General update.

*Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.