

## SAFETY DATA SHEET

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

Product Name: Potassium chlorate  
CAS: 3811-04-9  
Application: Laboratory chemicals, Manufacture of substances  
Manufacturer: Sinopharm Chemical Reagent Co., Ltd. No. 52 Ning Bo Road, Shanghai 200002, China  
Fax: 86-021-6321403  
Emergency Telephone: 86-0532-83889090  
Email: sj\_zjzx@sinopharm.com  
Website: <http://www.reagent.com.cn>  
MSDS No: SCRC CSDS3811-04-9 Potassium chlorate

### 2. Hazards identification

#### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Oxidizing solids Category 1 (H271) Acute oral toxicity Category 4 (H302) Acute Inhalation Toxicity - Dusts and Mists Category 4 (H332) Chronic aquatic toxicity Category 2 (H411)

#### Label elements

#### Labelling according Regulation (EC) No 1272/2008

#### Pictogram



#### Signal word: Danger

Hazard statement(s): H271 - May cause fire or explosion; strong oxidizer H302 - Harmful if swallowed H332 - Harmful if inhaled H411 - Toxic to aquatic life with long lasting effects

#### Precautionary statement(s):

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P221 - Take any precaution to avoid mixing with combustibles. P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
P371 + P380 + P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
not applicable  
P501 Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards

none

### 3. Composition/information on ingredients

#### Substance/Mixture: Substance

Component	CAS RN	Concentration
Potassium chlorate	3811-04-9	≤100

### 4. First aid measures

#### Description of 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 immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### If swallowed

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

#### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### Indication of any immediate medical attention and special treatment needed

no data available

### 5. Firefighting measures

#### Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Special hazards arising from the substance or mixture

no data available

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Further information

No data available

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

#### Environmental precautions

Do not let product enter drains.

#### 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.

#### Reference to other sections

For disposal see section 13.

### 7. Handling and storage

#### Precautions for safe handling

For precautions see section 2.2.

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

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Do not store near combustible materials. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8. Exposure controls/personal protection

#### Control parameters

#### Components with workplace control parameters

MAC: No data available

PC-STEL: No data available

TLV-TWA: No data available

PC-TWA: No data available

TLV-C: No data available

TLV-STEL: No data available

#### Exposure controls

#### Appropriate engineering controls

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

#### Personal protective equipment

#### 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

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.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN14387) respirator cartridges as a backup to engine protection, use a full-face supplied air respirator. 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

#### Information on basic physical and chemical properties

a) Appearance	Appearance White
b) Odour	Physical State Powder Solid
c) Odour Threshold	no data available
d) pH	No data available
e) Melting point/freezing point	5-6 (73g/L, H <sub>2</sub> O, 20°C)
f) Initial boiling point and boiling range	356-368°C
g) Flash point	400°C/760mmHg(dec.)
h) Evaporation rate	NA
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	$\rho$ (20) 2.32g/mL
n) Water solubility	no data available
o) Partition coefficient: noctanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	NA
s) Explosive properties	no data available
t) Oxidizing properties	no data available

## Other safety information

No data available.

## 10. Stability and reactivity

### Reactivity

no data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - No data available  
In the event of fire: see section 5

## 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/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.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

#### Additional Information

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

### Results of PBT and vPvB assessment

No data available

### Other adverse effects

No data available

## 13. Disposal considerations

### Waste treatment methods

Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product.

### Contaminated packaging

Dispose of as unused product.

## 14. Transport information

### UN number

ADR/RID:1485

IMDG:1485

IATA:1485

### UN proper shipping name

ADR/RID:POTASSIUM CHLORATE

IMDG:POTASSIUM CHLORATE

IATA:POTASSIUM CHLORATE

### Transport hazard class(es)

ADR/RID:5.1

IMDG:5.1

IATA:5.1

**Packaging group**

ADR/RID:II

IMDG:II

IATA:II

**Environmental hazards**

ADR/RID:yes

IMDG:yes

IATA:yes

**Special precautions for user**

no data available

**15. Regulatory information**

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

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

No data available

**Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**16. Other information**

**Full text of H-Statements referred to under sections 2 and 3.**

H271 - May cause fire or explosion; strong oxidizer  
H302 - Harmful if swallowed  
H332 - Harmful if inhaled  
H411 - Toxic to aquatic life with long lasting effects

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sinopharm Chemical Reagent Co.,Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.