

Chemical Safety Data Sheet

Section 1 Product and Company Identification

| Product Name | Potassium Monopersulfate Compound | | |
|------------------------|--|--|--|
| Manufacturer name | SHAOXIN SHANGYU JIEHUA CHEMICAL CO., LTD. | | |
| Manufacturer address | Weiyi East Road 1#, Hangzhou Bay Shangyu economic and | | |
| | Technological Development Area, Zhejiang Province P. R. China. | | |
| Manufacturer post code | 312300 | | |
| Manufacturer fax | +86-575-82211434 | | |
| Manufacturer email | wangyan@shangyuchem.com/wjy-8012@163.com | | |
| Emergency number | +86-532-83889090 | | |
| Effective date | Dec 28, 2015 | | |
| | | | |

Section 2 Hazards Identification

Hazard class and label elements of the substance according to GHS(the fifth revised edition):

GHS hazard class

| Physical hazard(s) | Acute toxicity-oral | Category5 |
|--------------------|--|------------|
| Health hazard(s) | Skin corrosion/irritation | category1b |
| | Serious eye damage/eye irritation | category1 |
| | Specific target organ toxicity, single exposure; | |
| | Respiratory tract irritation | category3 |

Pictogram



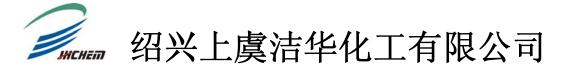
Signal



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| Hazard statement(s) | Danger |
|--------------------------|---|
| | H303 May be harmful if swallowed |
| | H314 Causes severe skin burns and eye damage |
| | H318 Causes serious eye damage |
| Precautionary statements | H335 May cause respiratory irritation |
| Prevention | |
| | P260 Do not breathe dust/fume/gas/mist/vapours/spray. |
| | P261 Avoid breathing dust/fume/gas/mist/vapours/spray. |
| | P264 Wash hands thoroughly after handling. |
| | P271 Use only outdoors or in a well-ventilated area. |
| | P280 Wear protective gloves/protective clothing/eye protection/face |
| Response | protection. |
| | P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce |
| | vomiting. |
| | P303+P361+P353 IF ON SKIN (or hair): Take off immediately all |
| | contaminated clothing. Rinse skin with water [or shower]. |
| | 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. |
| | P310 Immediately call a POISON CENTER/doctor. |
| | P312 Call a POISON CENTER/doctor/if you feel unwell. |
| | P363 Wash contaminated clothing before reuse. |
| Storage | P403+P233 Store in a well-ventilated place. Keep container tightly |
| | closed. |
| | P405 Store locked up. |
| Disposal | P501 Dispose of contents/container in accordance with local/ |
| | regional/national/international regulations. |



| Component | Concentration (%W/W) | CAS No. | EC No. |
|-----------------------------|----------------------|------------|-----------|
| Potassium Monopersulfate | 42~48 | 10058-23-8 | 233-187-4 |
| Potassium Sulfate | 24~28 | 7778-80-5 | 231-915-5 |
| Potassium Bisulfate | 19~22 | 7646-93-7 | 231-594-1 |
| Magnesium Sulfate | Approx.2 | 7487-88-9 | 231-298-2 |

Section 3 Composition/Information on Ingredients

Section 4 First Aid Measures

| After skin contact | Immediate flush skin with plenty of water. Remove and isolate contaminated |
|--------------------|--|
| | clothing and shoes. If irritation persist, get medical attention immediately. for |
| | minor skin contact, avoid spreading material on unaffected skin. Wash clothing |
| | separately before reuse. |
| After eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Assure |
| | adequate flushing of the eyes by separating the eyelids with fingers. Get medical |
| | advice. |
| After ingestion | If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. |
| | Loosen tight clothing such as a collar, tie, belt or waistband the substance. Seek |
| | immediate medical attention. Never give anything by mouth to an unconscious |
| | person. Rinse mouth with water. Consult a physician. |
| After inhalation | Move to fresh air. Oxygen or artificial respiration if needed, Get immediately |
| | medical attention. |



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Section 5 Fire Fighting Measures

| Hazardous products of combustion | Can be released in case of fire: oxygen, sulfur dioxide, sulfur | | |
|----------------------------------|---|--|--|
| | anhydride, etc. | | |
| Extinguishing method | Water | | |
| Special protective equipment | Wear full protective clothing, including helmet, self- | | |
| | contained positive pressure or pressure demand breathing | | |
| | apparatus, protective clothing and face mask. | | |

Section 6 Accidental Release Measure

| Personal protective measures | Ensure adequate ventilation. Remove all sources of ignition. |
|---------------------------------------|--|
| | Do not touch damaged containers or spilled material unless |
| | wearing appropriate protective clothing. Ventilate closed |
| | spaces before entering. Keep unnecessary personnel away. |
| Environmental protective measures | Prevent further leakage or spillage if safe to do so. Do not |
| | allow material to be released to the environment without |
| | proper governmental permits. |
| Methods for taking in and cleaning up | Sweep up, then place into a suitable container for disposal. |
| | Avoid generating dusty conditions. Provide ventilation. |
| | Clean contaminated surface thoroughly. |

Section 7 Handling and Storage

Handling Avoid contact with skin, eyes, mucous membranes and clothing. In case of insufficient ventilation, wear Suitable respiratory equipment if ingested. Avoid formation of dust and aerosols. Keep away from heat, sources of ignition, sparks or open flame.
Storage Keep in a cool, dry, well-ventilated place. Keep tightly closed until used. Keep away from fire and heat source. Sealed packaging. Store away from reducing agents, strong bases, heavy metallic salt, etc.



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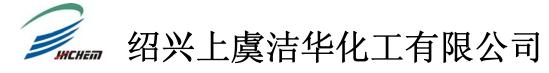
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Section 8 Exposure Controls/Personal Protection

| Engineering Controls | Facilities storing or utilizing this material should be equipped with an | | |
|-------------------------------|--|--|--|
| | eyewash and a safety shower facility. Use adequate ventilation to keep | | |
| | airborne concentrations low. | | |
| Respiratory protection | When workers are facing concentrations above the exposure limit they | | |
| | must use appropriate certified respirators. | | |
| Eye protection | Use safety glasses with side shields or safety goggles as mechanical | | |
| | barrier for prolonged exposure. | | |
| Hand Protection | Wear appropriate chen1ical resistant gloves. | | |
| Body protection | Use clean protective body-covering as needed to minimize contact with | | |
| | clothing and skin. | | |

Section 9 Physical and Chemical Properties

| Appearance | White solid |
|--|-------------------|
| Odour | No data available |
| Odour Threshold | No data available |
| рН | 2~3 |
| Melting point/freezing point | No data available |
| Initial boiling point and boiling range | No data available |
| Flash point | No data available |
| Evaporation rate | No data available |
| Flammability (solid, gas) | No data available |
| Upper/lower flammability or explosive limits | No data available |
| Vapour pressure | No data available |
| Vapour density | No data available |
| Relative density(g/L) | 800~1200 |
| Water solubility(g/L,20°C) | 256 |
| Partition coefficient: noctanol/water | No data available |
| Autoignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | No data available |



Section 10 Stability and Reactivity

| Reactive | No data available. |
|------------------------------------|---|
| Chemical stability | This is a stable chemical under the recommended storage |
| | condition. |
| Possibility of hazardous reactions | No data available. |
| Avoid conditions | Heat, flames and sparks. Incompatibles. The extreme |
| | temperatures and direct sunlight. |
| Incompatible materials | Reducing agents, strong bases, heavy metallic salt. |
| Hazardous decomposition products | Oxygen, sulfur dioxide, sulfur anhydride. |

Section 11 Toxicological Information

Acute toxicity: Potassium bisulfate : LD₅₀ (rat, 0ral) 2340mg/Kg.

Potassium sulfate : LD₅₀ (rat, Oral) 6600mg/Kg. Skin corrosion/irritation: Cause serious skin burns and eye damage. Serious eye damage/eye irritation: Cause serious eye damage. Respiratory or skin sensitization: No data available. Germ cell mutagenicity: No data available. Carcinogenicity: No data available. Reproductive toxicity: No data available. Specific target organ toxicity – single exposure: May cause respiratory irritation. Specific target organ toxicity – repeated exposure: No data available.



Section 12 Ecological Information

| Toxicity: | potassium bisulfate | |
|---|-----------------------------|--|
| | Test & Species | |
| | 96Hr LC50 fish: 3500mg/l | |
| | 48Hr EC50 Daphnia: 1310mg/l | |
| | 72Hr EC50 Algae: N/A | |
| | Potassium sulfate | |
| | Test & Species | |
| | 96Hr LC50 fish: 680mg/l | |
| | 48Hr EC50 Daphnia: N/A | |
| | 72Hr EC5oAlgae:N/A | |
| Persistence and degradabili | ity: No data available. | |
| Bioaccumulative potential: No data available. | | |

Mobility in soil: No data available.

Other adverse effects: No data available.

Section 13 Disposal Considerations

Property of waste: Hazardous Waste.

Methods of disposal: Contact a licensed professional waste disposal service to disposal of this material. Dispose of in accordance with local Environment regulations or local authority Requirement.

Precautions of disposal: Professional processing together.

Section 14 Transport Information

UN number: 3260

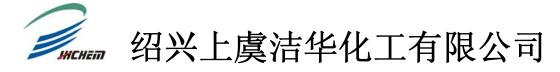
UN proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N, o. S.

(contains Potassium peroxymonosulfate and Potassium bisulfate)

Transportation primary hazard class: 8

Transportation secondary hazard class: —

Packing group: II



| Component | CHINA | TSCA | ENCS | EINECS |
|-----------------------------|--------------|--------------|--------------|--------------|
| Potassium Monopersulfate | \checkmark | \checkmark | \checkmark | \checkmark |
| Potassium Sulfate | \checkmark | \checkmark | \checkmark | |
| Potassium Bisulfate | | | \checkmark | \checkmark |
| Magnesium Sulfate | | V | \checkmark | \checkmark |

Section 15 Regulatory Information

Note 1:

CHINA - China Inventory of Existing Chemical Substances (IECSC)

TSCA - United States Inventory of Toxic Substances Control Act Chemical Substances (TSCA)

ENCS - Japan Existing and New Chemical Substances (ENCS)

EINECS - European Inventory of Existing Commercial Chemical Substances (EINECS)

Note 2:

" $\sqrt{}$ " Indicates that the substance included in the regulations

"-" That no data or included in the regulations

Section 16 Additional Information

This Safety Data Sheet (SDS) was prepared according to UN GHS (the fifth revised edition), is only for users reference. Users should make their independent judgment of suitability of these information for their particular purposes.