

# SAFETY DATA SHEETS

According to the UN GHS revision 8

Version: 1.0

Creation Date: July 15, 2019

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YATAI CHEMICAL CORP

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## 1. SECTION 1: Identification

### 1.1. GHS Product identifier

Product name Ammonium sulphate

### 1.2. Other means of identification

Other names Ammonium sulfate; Ammonium Sulfate;

### 1.3. Recommended use of the chemical and restrictions on use

Identified uses Surfactants

Uses advised against no data available

### 1.4. Supplier's details

Company Yatai Chemical Corp

Address Room 20A5, No.585, Longhua West Road,  
Shanghai, China

Telephone 0086-21-64563115

### 1.5. Emergency phone number

Emergency phone number 0086-21-64563115

Service hours Monday to Friday, 9am-5pm (Standard time zone:  
UTC/GMT +8 hours).

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## 2. SECTION 2: Hazard identification

### 2.1. Classification of the substance or mixture

Not classified.

### 2.2. GHS label elements, including precautionary statements

Pictogram(s) No symbol.

Signal word No signal word

Hazard statement(s) none

Precautionary statement(s)

Prevention none

Response none

Storage none

Disposal none

### 2.3. Other hazards which do not result in classification

no data available

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## 3. SECTION 3: Composition/information on ingredients

### 3.1. Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Ammonium sulphate	Ammonium sulphate	7783-20-2	231-984-1	100%

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## 4. SECTION 4: First-aid measures

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

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

#### **If inhaled**

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### **Following skin contact**

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### **Following eye contact**

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

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

no data available

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

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Ammonia and related compounds

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## 5. SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

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

### 5.2. Specific hazards arising from the chemical

no data available

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

Wear self-contained breathing apparatus for firefighting if necessary.

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## **6. SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **6.2. Environmental precautions**

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

### **6.3. Methods and materials for containment and cleaning up**

SRP: Wastewater from contaminant suppression, cleaning of protective clothing/equipment, or contaminated sites should be contained and evaluated for subject chemical or decomposition product concentrations. Concentrations shall be lower than applicable environmental discharge or disposal criteria. Alternatively, pretreatment and/or discharge to a permitted wastewater treatment facility is acceptable only after review by the governing authority and assurance that "pass through" violations will not occur. Due consideration shall be given to remediation worker exposure (inhalation, dermal and ingestion) as well as fate during treatment, transfer and disposal. If it is not practicable to manage the chemical in this fashion, it must be evaluated in accordance with EPA 40 CFR Part 261, specifically Subpart B, in order to determine the appropriate local, state and federal requirements for disposal.

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## **7. SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place.

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## **8. SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Occupational Exposure limit values**

no data available

#### **Biological limit values**

no data available

### **8.2. Appropriate engineering controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

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

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flammable resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. 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

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

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## 9. SECTION 9: Physical and chemical properties and safety characteristics

<b>Physical state</b>	Solid. Orthorhombic crystals or white granules.
<b>Colour</b>	White or brown orthorhombic crystals
<b>Odour</b>	Odorless
<b>Melting point/freezing point</b>	280°C
<b>Boiling point or initial boiling point and boiling range</b>	330°C at 760 mmHg
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	no data available
<b>Auto-ignition temperature</b>	Not flammable (USCG, 1999)
<b>Decomposition temperature</b>	no data available
<b>pH</b>	pH = 5.5 (0.1 M aqueous solution)
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	Freely soluble in water, insoluble in ethanol
<b>Partition coefficient n-octanol/water</b>	log Pow = 0.48. Temperature:25 °C.
<b>Vapour pressure</b>	0 hPa. Temperature:25 °C.
<b>Density and/or relative density</b>	1.77. Temperature:25 °C.
<b>Relative vapour density</b>	no data available
<b>Particle characteristics</b>	no data available

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## 10. SECTION 10: Stability and reactivity

### 10.1. Reactivity

Dissolves in water with evolution of some heat.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

AMMONIUM SULFATE is acidic in aqueous solution. When a little ammonium sulfate is added to fused potassium nitrite, a vigorous reaction occurs attended by flame [Mellor 2:702 1946-47].

### 10.4. Conditions to avoid

no data available

### 10.5. Incompatible materials

Incompatible materials: Strong oxidizing agents, strong bases.

### 10.6. Hazardous decomposition products

When heated to decomposition it emits very toxic fumes of /sulfur oxides, nitrogen oxides and ammonia/.

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## 11. SECTION 11: Toxicological information

### Acute toxicity

- Oral: LD50 - rat (male/female) - 4 250 mg/kg bw.
- Inhalation: LC50 Guinea pig inhalation 900 mg/cu m for 8 hr
- Dermal: LD50 - rat (male/female) - > 2 000 mg/kg bw.

### 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

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## 12. SECTION 12: Ecological information

### 12.1. Toxicity

- Toxicity to fish: LC50 - Oncorhynchus mykiss (previous name: Salmo gairdneri) - 53 mg/L - 96 h. Remarks: Ammonium sulphate.
- Toxicity to daphnia and other aquatic invertebrates: EC50 - Ceriodaphnia acanthina - 121.7 mg/L - 48 h. Remarks: Ammonium sulphate.
- Toxicity to algae: EC50 - Chlorella vulgaris - ca. 1 605 mg/L - 5 d.
- Toxicity to microorganisms: EC20 - activated sludge, domestic - 1 050 mg/L - 30 min. Remarks: Respiration rate.

### 12.2. Persistence and degradability

no data available

### 12.3. Bioaccumulative potential

no data available

### 12.4. Mobility in soil

no data available

### 12.5. Other adverse effects

no data available

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## 13. SECTION 13: Disposal considerations

### 13.1. Disposal 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.

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## 14. SECTION 14: Transport information

### 14.1. UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### 14.2. UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### 14.3. Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only,

IMDG: Not dangerous goods. (For reference

IATA: Not dangerous goods. (For reference



- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS - The International Chemical Safety Cards (ICSC), website:  
<http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website:  
<https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website:  
<http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:  
[http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website:  
<http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

**Any questions regarding this SDS, Please send your inquiry to [ydcl@yataichemical.com](mailto:ydcl@yataichemical.com)**

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