

# SAFETY DATA SHEETS

According to the UN GHS revision 8

Version: 1.0

Creation Date: July 15, 2019

Revision Date: July 15, 2019



YATAI CHEMICAL CORP

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## 1. SECTION 1: Identification

### 1.1. GHS Product identifier

Product name Urea

### 1.2. Other means of identification

Product number -

Other names diaminomethanal; Urea; UREUM

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

Identified uses Industrial and scientific research uses.

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
Urea	Urea	57-13-6	200-315-5	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

Fresh air, rest.

#### Following skin contact

Rinse and then wash skin with water and soap.

#### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

#### Following ingestion

Give one or two glasses of water to drink. Rest.

### 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

no data available

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## 5. SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

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

### 5.2. Specific hazards arising from the chemical

Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.

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

In case of fire in the surroundings, use appropriate extinguishing media.

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## 6. SECTION 6: Accidental release measures

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

Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.

### 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

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 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

Separated from incompatible materials. See Chemical Dangers.

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

### 8.1. Control parameters

#### Occupational Exposure limit values

Component	Urea			
CAS No.	57-13-6			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Latvia		10		
People's Republic of China		5		10 (1)
	Remarks			
People's Republic of China	(1) 15 minutes average value			

#### 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 safety spectacles.

#### Skin protection

Protective gloves.

#### Respiratory protection

Use local exhaust.

#### Thermal hazards

no data available

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

<b>Physical state</b>	Solid. Crystalline.
<b>Colour</b>	No information available.
<b>Odour</b>	no data available
<b>Melting point/freezing point</b>	134 °C.
<b>Boiling point or initial boiling point and boiling range</b>	Remarks:Not determinable because of methodological limitations.
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	-15°C(lit.)
<b>Auto-ignition temperature</b>	> 134 °C. Remarks:No self-ignition observed up to the melting point.
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	In water: 624 g/L. Temperature:20 °C. Remarks:No further information provided.
<b>Partition coefficient n-octanol/water</b>	log Pow = < -1.73. Temperature:22 °C.
<b>Vapour pressure</b>	0 mm Hg. Temperature:25 °C.
<b>Density and/or relative density</b>	1.33 g/cm <sup>3</sup> . Temperature:20 °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

no data available

### 10.2. Chemical stability

no data available

### 10.3. Possibility of hazardous reactions

No data.Decomposes on heating above the melting point. This produces toxic gases. Reacts with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates. This generates fire and explosion hazard.

### 10.4. Conditions to avoid

no data available

### 10.5. Incompatible materials

no data available

## 10.6. Hazardous decomposition products

no data available

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# 11. SECTION 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

The substance is irritating to the eyes, skin and respiratory tract.

## STOT-repeated exposure

Repeated or prolonged contact with skin may cause dermatitis.

## Aspiration hazard

Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly, especially if powdered.

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# 12. SECTION 12: Ecological information

## 12.1. Toxicity

- Toxicity to fish: LC50 - *Leuciscus idus melanotus* - > 10 000 mg/L - 48 h.
- Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - > 10 000 mg/L - 24 h.
- Toxicity to algae: toxicity threshold - *Scenedesmus quadricauda* - > 10 000 mg/L - 192 h.
- Toxicity to microorganisms: Toxicity threshold - *Pseudomonas putida* and *Entosiphon sulcatum* - 29 mg/L - 72 h.

## 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, please check.)

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

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

### 14.4. Packing group, if applicable

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.)

### 14.5. Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

### 14.6. Special precautions for user

no data available

### 14.7. Transport in bulk according to IMO instruments

no data available

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## 15. SECTION 15: Regulatory information

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

Chemical name	Common names and synonyms	CAS number	EC number
Urea	Urea	57-13-6	200-315-5
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.

## 16. SECTION 16: Other information

### Information on revision

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### 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%

### 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/>

**Other Information**

Temperature of decomposition is unknown in the literature.

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

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*Disclaimer: 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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*