



# **GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD**

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

---

## **MATERIAL SAFETY DATA SHEET**

### **1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

#### **1.1 Product identifiers**

Product name : Cyclohexylamine

#### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Manufacture of substances

#### **1.3 Details of the supplier of the safety data sheet**

Manufacturer's name : Golden Time Chemical (Jiangsu) Co., Ltd

Manufacturer's address : No.90-168,Fangshui Road,  
Nanjing Chemical Industry Park,  
Jiangsu, China

TEL: 86-25-58393388 FAX: 86-25-57117388

### **2. HAZARDS IDENTIFICATION**

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

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

Flammable liquid - Category 3

Acute toxicity, Oral, Inhalation, Dermal - Category 3

Skin corrosion/irritation - Category 1

Serious eye damage/eye irritation - Category 1

Reproductive toxicant - Category 2

Corrosive to metals - Category 1

Acute aquatic toxicity - Category 2

##### **Classification according to EU Directives 67/548/EEC or 1999/45/EC**



# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

Flammable. Possible risk of impaired fertility. Causes burns. Harmful in contact with skin and if swallowed.

## 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word

Danger

Hazard statement(s)

H226

Flammable liquid and vapour.

H331

Toxic if inhaled.

H311

Toxic in contact with skin.

H301

Toxic if swallowed.

H314

Causes severe skin burns and eye damage.

H361f

Suspected of damaging fertility.

H290

May be corrosive to metals.

H401

Toxic to aquatic life.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301+P310

IF SWALLOWED: Immediately call the TOXICOLOGICAL INFORMATION CENTRE or doctor/physician.

P308+P313

IF exposed or concerned: Get medical advice/attention.

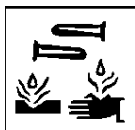
Supplemental Hazard

none

Statements

**According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)



R-phrases)

R10

Flammable.

R21/22

Harmful in contact with skin and if swallowed.

R34

Causes burns.

R62

Possible risk of impaired fertility.

S-phrases)



# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : Aminocyclohexane

Formula :  $C_6H_{13}N$

Molecular Weight : 99.17 g/mol

## 4. FIRST AID MEASURES

### 4.1 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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. 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.

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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea



# **GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD**

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

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

no data available

## **5. FIREFIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

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

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

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

### **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

### **5.4 Further information**

Use water spray to cool unopened containers.

## **6. ACCIDENTAL RELEASE MEASURES**

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

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **6.2 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.

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### **6.4 Reference to other sections**

For disposal see section 13.



# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep container tightly closed.

Keep only in original container.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

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

**In case of fire:** use appropriate extinguishing media for extinction.

**IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician.

**IF SWALLOWED:** Immediately call a POISON CENTER or doctor/ physician.

Rinse mouth.

**IF ON SKIN (or hair):** Remove/ Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Absorb spillage to prevent material damage.



# **GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD**

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

---

## **Storage:**

Store in a well-ventilated place. Keep cool.

Store in a well-ventilated place. Keep container tightly closed.

Store in corrosive resistant container with a resistant inner liner.

## **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

## **7.3 Specific end uses**

no data available

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product

#### **Personal protective equipment**

##### **Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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.



# **GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD**

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

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**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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)

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

Appearance: Colorless Liquid with strong fishy, Amine odor.

Specific gravity (H<sub>2</sub>O=1) : 0.8647 (25 degree C)

Boiling point: 134.5 degree C (760 mmHg)

Freezing point: -17.7 degree C

Flash point: 28.3 degree C (closed cup)

Autoignition temperature: 293.3 degree C

Flammable limits in air: Lower 1.5% Upper 9.4%

PH: 10.5 (0.1% aqueous solution)

### **9.2 Other safety information**

no data available

## **10. STABILITY AND REACTIVITY**



# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

Add: No.90-168, Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

## 10.1 Reactivity

no data available

## 10.2 Chemical stability

no data available

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

Heat, flames and sparks.

## 10.5 Incompatible materials

Strong oxidizing agents, Carbon dioxide (CO<sub>2</sub>), sodium hypochlorite, Organic acids,  
Mineral acids, Peroxides

## 10.6 Hazardous decomposition products

Other decomposition products - no data available

# 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

### Acute toxicity

LD<sub>50</sub> Oral - rat - 11 mg/kg

Remarks: Behavioral: Food intake (animal). Lungs, Thorax, or Respiration:  
Pulmonary emboli.

Gastrointestinal: Other changes.

LC<sub>50</sub> Inhalation - rat - 7.500 mg/m<sup>3</sup>

Remarks: Behavioral: Excitement. Behavioral: Muscle contraction or spasticity.

LD<sub>50</sub> Dermal - rabbit - 277 mg/kg

### Skin corrosion/irritation

Skin - rabbit - Severe skin irritation - 24 h

### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation - 24 h





# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

## Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

no data available

## Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC,ACGIH, NTP, or EPA classification.

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

Suspected human reproductive toxicant

## Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

no data available

## Aspiration hazard

no data available

## Potential health effects

- |                   |   |
|-------------------|---|
| <b>Inhalation</b> | May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| <b>Ingestion</b>  | May be fatal if swallowed. Causes burns.  |
| <b>Skin</b>       | Toxic if absorbed through skin. Causes skin burns.  |
| <b>Eyes</b>       | Causes eye burns.   |

## Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

## Additional Information

RTECS: GX0700000



# **GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD**

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

---

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish: LC50 - Leuciscus idus (Golden orfe) - 44 mg/l - 96 h

Toxicity to daphnia and other aquatic: EC50 - Daphnia magna (Water flea) - 49 mg/l - 24 h.

### **12.2 Persistence and degradability**

Biodegradability

### **12.3 Bioaccumulative potential**

no data available

### **12.4 Mobility in soil**

no data available

### **12.5 Results of PBT and vPvB assessment**

no data available

### **12.6 Other adverse effects**

Harmful to aquatic life. no data available

## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

### **14.1 UN number**

ADR/RID: 2357 IMDG: 2357 IATA: 2357

### **14.2 UN proper shipping name**

ADR/RID: CYCLOHEXYLAMINE



# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

Add: No.90-168,Fangshui Road, Nanjing Chemical Industry Park, Jiangsu, China  
TEL: 86-25-58393388 FAX: 86-25-57117388

IMDG: CYCLOHEXYLAMINE

IATA: Cyclohexylamine

## 14.3 Transport hazard class(es)

ADR/RID: 8 (3) IMDG: 8 (3) IATA: 8 (3)

## 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

## 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

## 14.6 Special precautions for user

no data available

## 15. REGULATORY INFORMATION

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

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

no data available

### 15.2 Chemical Safety Assessment

no data available

## 16. OTHER INFORMATION

### 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. we shall not be held liable for any damage resulting from handling or from contact with the above product.

CREATED: MAY.05,2009

LAST UPDATED: SEP.07,2012