



# GOLDEN TIME CHEMICAL (JIANGSU) CO., LTD

## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006  
Version 2.0 Revision Date 24.07.2013

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

#### 1.1 Product identifiers

Product name : **Dicyclohexylamine**

CAS-No. : 101-83-7

#### 1.2 Details of the supplier of the safety data sheet

Company : Golden Time Chemical (Jiangsu) Co., Ltd  
No.90-168,Fangshui Road,  
Nanjing Chemical Industry Park,  
Jiangsu, China

Telephone : +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]

Skin corrosion (Category 1B)  
Acute aquatic toxicity (Category 1)  
Chronic aquatic toxicity (Category 1)  
Acute toxicity, Oral (Category 4)

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

Causes burns. Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 2.2 Label elements

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

Pictogram



Signal word : Danger

Hazard statement(s)

H302 : Harmful if swallowed.  
H314 : Causes severe skin burns and eye damage.  
H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 : Avoid release to the environment.  
P280 : Wear protective gloves/ protective clothing/ eye protection/ face

P305 + P351 + P338 protection.  
 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 or doctor/ physician.  
 P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements none

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

Hazard symbol(s)



R-phrase(s)

R22

R34

R50/53

Harmful if swallowed.

Causes burns.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

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).

S60

This material and its container must be disposed of as hazardous waste.

S61

Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**2.3 Other hazards - none**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Formula : C<sub>12</sub>H<sub>23</sub>N  
 Molecular Weight : 181,32 g/mol

Component	Concentration
<b>Dicyclohexylamine</b>	
CAS-No.	101-83-7
EC-No.	202-980-7
Index-No.	612-066-00-3

**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. 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**

**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>)

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**

no data available

**6. ACCIDENTAL RELEASE MEASURES**

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe 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**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store under inert gas.

**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**

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

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. 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.

#### Immersion protection

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: > 480 min

#### Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm

Break through time: > 30 min

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Body Protection

Complete suit protecting against chemicals, 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

- |  |                                     |
|--|-------------------------------------|
| a) Appearance                              | Form: liquid                        |
| b) Odour                                   | no data available                   |
| c) Odour Threshold                         | no data available                   |
| d) pH                                      | 11 at 1 g/l at 20 °C                |
| e) Melting point/freezing point            | Melting point/range: -2 °C - lit.   |
| f) Initial boiling point and boiling range | 117 - 120 °C at 13 hPa256 °C - lit. |
| g) Flash point                             | 96 °C - closed cup                  |
| h) Evaporation rate                        | no data available                   |
| i) Flammability (solid, gas)               | no data available                   |

j)	Upper/lower flammability or explosive limits	no data available
k)	Vapour pressure	16 hPa at 37,7 °C
l)	Vapour density	7,26
m)	Relative density	0,912 g/cm <sup>3</sup> at 20 °C
n)	Water solubility	no data available
o)	Partition coefficient: n-octanol/water	log Pow: -0,4 at 25 °C
p)	Autoignition temperature	no data available
q)	Decomposition temperature	no data available
r)	Viscosity	no data available
s)	Explosive properties	no data available
t)	Oxidizing properties	no data available

## 9.2 Other safety information

no data available

## 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 available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 373 mg/kg

#### Skin corrosion/irritation

Skin - rabbit - Severe skin irritation

#### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

Genotoxicity in vitro - Human - leukocyte  
Cytogenetic analysis

## **Carcinogenicity**

Carcinogenicity - rat - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Gastrointestinal: Tumors. Liver: Tumors.

Carcinogenicity - mouse - Subcutaneous

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

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

## **Potential health effects**

### **Inhalation**

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

### **Ingestion**

Harmful if swallowed. Causes burns.

### **Skin**

May be harmful if absorbed through skin. Causes skin burns.

### **Eyes**

Causes eye burns.

## **Additional Information**

RTECS: HY4025000

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish

LC50 - Leuciscus idus (Golden orfe) - 32 - 46 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 43 mg/l - 48 h

Toxicity to algae

EC50 - Desmodesmus subspicatus (green algae) - 3,3 mg/l - 72 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**

Very toxic to aquatic life.

## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

<b>14.1 UN number</b> ADR/RID: 2565	IMDG: 2565	IATA: 2565
<b>14.2 UN proper shipping name</b> ADR/RID: DICYCLOHEXYLAMINE IMDG: DICYCLOHEXYLAMINE IATA: Dicyclohexylamine		
<b>14.3 Transport hazard class(es)</b> ADR/RID: 8	IMDG: 8	IATA: 8
<b>14.4 Packaging group</b> ADR/RID: III	IMDG: III	IATA: III
<b>14.5 Environmental hazards</b> ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no
<b>14.6 Special precautions for user</b> 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. Golden Time Chemical (Jiangsu) Co., Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.