#### 1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Cyclohexane

Manufacturer/supplier identification

Company: Guangdong Guanghua Sci-Tech Co.,Ltd

Address: No.295 Daxue Road, Shantou

PostCode:515000

E-mail: export@ghtech.com

Emergency telephone No.: +86-754-82515813

Fax No.: +86-754-88221999

#### 2. Hazards identification

#### Classification of the substance or mixture

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

Flammable solids (Category 2)

Flammable liquids (Category 2)

Skin corrosion/irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3), Narcotic effects

Aspiration hazard (Category 1)

Short-term (acute) aquatic hazard (Category 1)

Long-term (chronic) aquatic hazard (Category 1)

### Label elements

Pictogram



Signal word Danger

#### Hazard statement(s)

H225 Highly flammable liquid and vapor.H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statement(s)

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. P233 Keep container tightly closed. Ground/bond container and receiving equipment. P240 Use explosion-proof electrical/ventilating/lighting/equipment. P241 P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. Avoid breathing mist or vapors. P261 Wash skin thoroughly after handling. P264

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280	Wear protective gloves/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin
	with water/ shower.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call
	a POISON CENTER/ doctor if you feel unwell.
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

## Supplemental Hazard Statements

none

### 3. Composition/information on ingredients

Synonyms Cyclohexane

CAS-No.: 110-82-7 *M*: 84.16 g/mol

Molecular formula: C<sub>6</sub>H<sub>12</sub>

## 4. First aid measures

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

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

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. Fire-fighting measures

## Suitable extinguishing media

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

# Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. Accidental release measures

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

## **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

### **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

#### 8. Exposure controls and personal protection

## **Appropriate engineering controls**

General industrial hygiene practice.

# Personal protective equipment

# **Eye/face protection**

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.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Do not let product enter drains.

#### 9. Physical and chemical properties

Form: liquid Colour: Colorless Odour: not available pH value: not available Melting point: 6 °C Boiling point: 80.7~81°C

**Ignition temperature:** not available

Flash point: -16.5 °C

Autoignition temperature: not available

**Explosion limits** 

lower: not available
upper: not available

**Density** : 0.78

Bulk density: not available

## Solubility in

water (20 °C): practically insoluble in water

diluted acids (20  $^{\circ}$ C): not available Thermal decomposition: not available

## 10. Stability and reactivity

# **Chemical stability**

no data available

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Oxidizing agents

## Hazardous decomposition products

Other decomposition products - no data available

#### 11. Toxicological information

#### Acute toxicity

LD50 Oral - Rat - 12,705 mg/kg

LC50 Inhalation - Rat - 4 h - 13,900 mg/m<sup>3</sup> LD50 Dermal - Rabbit - > 2,000 mg/m<sup>3</sup>

#### Skin corrosion or irritation

Skin - Rabbit

Result: No skin irritation

## Serious eye damage or eye irritation

Eyes - Rabbit

Result: Mild eye irritation

#### Respiratory or skin sensitization

Information given is based on data obtained from similar substances.

#### Germ cell mutagenicity

no data available

### Reproductive toxicity

no data available

#### Carcinogenicity

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.

### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

## Specific target organ toxicity - repeated exposure

no data available

### **Aspiration hazard**

no data available

## 12. Ecological information

### **Toxicity**

Toxicity to fish LC50 - Blue gill sunfish – 34.7 mg/l - 96 h

LC50 - Pimephales promelas - 93 mg/l - 96 h

Toxicity to daphnia and EC50 - Daphnia dubia (water flea) - 3.78 mg/l - 48 h

Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 95 % - Readily biodegradable

**Bioaccumulative potential** 

Bioaccumulation

Result: Not easily biodegradable

Mobility in soil

no data available

# 13. Disposal considerations

**Product** 

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

**Contaminated packaging** 

Dispose of as unused product.

## 14. Transport information

ADR/RID

UN-Number: 1145 Class: 3 Packing group:II

Proper shipping name: CYCLOHEXANE

**IMDG** 

UN-Number: 1145 Class: 3 Packing group:II

Proper shipping name: CYCLOHEXANE

Marine pollutant: no

**IATA** 

UN-Number: 1145 Class: 3 Packing group:II

Proper shipping name: Cyclohexane

### 15. Regulatory information

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

### 16. Other information

General update.

Regional representation:

This information is given on the authorised Safety Data Sheet for your country.