

# SAFETY DATA SHEETS

# According to the UN GHS revision 9

Version: 1.0 Creation Date: July 15, 2019 Revision Date: July 15, 2019

## **SECTION 1: Identification**

### 1.1 GHS Product identifier

**Product name** 1-chloro-2,5-dioxahexane

### 1.2 Other means of identification

Product number

Other names 1-(chloromethoxy)-2-methoxyethane;MEM chloride;MEM-

Chloride

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

**Identified uses** Industrial and scientific research use.

Uses advised against no data available

## 1.4 Supplier's details

**Company** Shanghai Yien Chemical Technology Co., Ltd

**Address** Building 6, 28 Yingong Road, Fengxian District, Shanghai

Chemical Industry Zone, Shanghai, 201400, China

**Telephone** +86-400-133-2688

## 1.5 Emergency phone number

**Emergency phone** 

number

+86-400-133-2688

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

+8 hours).

## **SECTION 2: Hazard identification**

### 2.1 Classification of the substance or mixture

Flammable liquids, Category 3 Skin irritation, Category 2 Eye irritation, Category 2

Specific target organ toxicity – single exposure, Category 3

Carcinogenicity, Category 1A

## 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word Danger

**Hazard statement(s)** H226 Flammable liquid and vapour

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H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation

H350 May cause cancer

#### **Precautionary statement(s)**

**Prevention** P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment. P241 Use explosion-proof [electrical/ventilating/lighting/...]

equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/... P264 Wash ... thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area.

P203 Obtain, read and follow all safety instructions before use.

**Response** P303+P361+P353 IF ON SKIN (or hair): Take off

immediately all contaminated clothing. Rinse affected areas

with water [or shower].

P370+P378 In case of fire: Use ... to extinguish. P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P317 If skin irritation occurs: Get medical help.

P362+P364 Take off contaminated clothing and wash it before

reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and

keep comfortable for breathing.

P319 Get medical help if you feel unwell.

P318 IF exposed or concerned, get medical advice. P403+P235 Store in a well-ventilated place. Keep cool.

P403+P233 Store in a well-ventilated place. Keep container

tightly closed.

P405 Store locked up.

**Disposal** P501 Dispose of contents/container to an appropriate treatment

and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

# 2.3 Other hazards which do not result in classification

no data available

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

#### 3.1 Substances

Storage

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
1-chloro-2,5- dioxahexane	1-chloro-2,5-dioxahexane	3970-21-6	223-589-8	100%

## **SECTION 4: First-aid measures**

# 4.1 Description of necessary first-aid measures

#### 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

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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

no data available

# **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

no data available

# 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## **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

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.

# **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

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

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

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# 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/flame 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

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

Physical state
Colour
Colour
Odour
Melting point/freezing
Clear colourless liquid
no data available
no data available
320°C(dec.)(lit.)

point

**Boiling point or initial** 214°C/22mmHg(lit.)

boiling point and boiling

range

Flammability no data available Lower and upper no data available

explosion

limit/flammability limit

Flash point 54°C(lit.)

**Auto-ignition** no data available

temperature

**Decomposition** no data available

temperature

pH no data available
Kinematic viscosity no data available
Solubility no data available
Partition coefficient n-

octanol/water

Vapour pressure no data available

**Density and/or relative** 1.09

density

**Relative vapour density** no data available **Particle characteristics** no data available

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# **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 available

## 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

# **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

no data available

#### STOT-repeated exposure

no data available

#### **Aspiration hazard**

no data available

# **SECTION 12: Ecological information**

# 12.1 Toxicity

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- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

## 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

# **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.

# **SECTION 14: Transport information**

### 14.1 UN Number

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

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

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

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

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

(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

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

no data available

# **SECTION 15: Regulatory information**

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

Chemical name	Common names and synonyms	CAS number	EC number
1-chloro-2,5- dioxahexane	1-chloro-2,5-dioxahexane	3970-21-6	223-589-8
<b>European Inventory of </b> (EINECS)	Listed.		
EC Inventory	Listed.		
<b>United States Toxic Sub</b>	Listed.		
China Catalog of Hazar	Not Listed.		
<b>New Zealand Inventory</b>	Not Listed.		
Philippines Inventory of (PICCS)	Not Listed.		
Vietnam National Chen	Listed.		
Chinese Chemical Inverto (China IECSC)	Not Listed.		
<b>Korea Existing Chemica</b>	Not Listed.		

## **SECTION 16: Other information**

#### Information on revision

**Creation Date** July 15, 2019 July 15, 2019 **Revision Date** 

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods
- 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
- 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 sds@xixisys.com

1-chloro-2,5-dioxahexane Page 7 of 8 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.

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