

# SAFETY DATA SHEETS

According to the UN GHS revision 9

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

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## SECTION 1: Identification

### 1.1 GHS Product identifier

**Product name** Octachloronaphthalene

### 1.2 Other means of identification

**Product number** -  
**Other names** Naphthalene, octachloro-; perchloronaphthalene;  
OCTACHLORONAPHTHALENE,20MG,NEAT

### 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 Baishun Biotechnology Co., Ltd  
**Address** No. 26, Lane 918, Lianye Road, Zhelin Town, Fengxian  
District, Shanghai, 201400, China  
**Telephone** +86-21-37581181

### 1.5 Emergency phone number

**Emergency phone number** +86-21-37581181  
**Service hours** Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

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## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)**



**Signal word** Warning  
**Hazard statement(s)** H302 Harmful if swallowed  
**Precautionary statement(s)**  
**Prevention** P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.

<b>Response</b>	P301+P317 IF SWALLOWED: Get medical help. P330 Rinse mouth.
<b>Storage</b>	none
<b>Disposal</b>	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

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Octachloronaphthalene	Octachloronaphthalene	2234-13-1	218-778-7	100%

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## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Fresh air, rest. Refer for medical attention.

#### Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention .

#### 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

Rinse mouth. Refer for medical attention .

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

Exposure Routes: inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms: Acne-form dermatitis; liver damage, jaundice Target Organs: Skin, liver (NIOSH, 2016)

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

NAPHTHALENE toxicosis caused by vapor inhalation can usually be managed simply by removing the individual to fresh air. Skin contamination should be removed promptly by washing with soap and water. Eye contamination should be removed by flushing with copious amounts of clear water. Irritation may be severe, and if it persists, should receive medical attention. SRP: /It may be helpful to empty stomach and administer dose of activated charcoal/ Examine the plasma for evidence of hemolysis: a reddish-brown tinge. Examine the blood smear for "ghosts" and Heinz bodies. If /hemolysis is/ present, monitor red blood cell count and hematocrit for anemia, urine for protein, and cells. Measure direct- and indirect-reacting bilirubin in the plasma. Monitor fluid balance and blood electrolytes. If possible, monitor urinary excretion of naphthol to assess severity of poisoning and clinical progress. If hemolysis is clinically significant, administer intravenous fluids to accelerate urinary excretion of the naphthol metabolite and protect the kidney from products of hemolysis. Use Ringer's-lactate or sodium bicarbonate to keep urine pH above 7.5. Consider use of mannitol, or furosemide, to promote diuresis. If urine flow declines, intravenous infusions must be carefully monitored to avoid fluid overload. Institute hemodialysis. Consider charcoal hemoperfusion in tandem to extract naphthalene and end-products. If anemia is severe, blood transfusions may be needed. Hydrocortisone may be of some benefit if significant hemolysis is present. Fumigant poisoning

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## SECTION 5: Fire-fighting measures

## **5.1 Suitable extinguishing media**

In case of fire in the surroundings: all extinguishing agents allowed.

## **5.2 Specific hazards arising from the chemical**

Literature sources indicate that this chemical is nonflammable. (NTP, 1992)

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

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

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## **SECTION 6: Accidental release measures**

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

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. Carefully collect remainder. Then store and dispose of according to local regulations.

### **6.2 Environmental precautions**

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. Carefully collect remainder. Then store and dispose of according to local regulations.

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

First remove all sources of ignition, then dampen the solid spill material with toluene, then transfer the dampened material to a suitable container. Use absorbent paper dampened with toluene to pick up any remaining material. Your contaminated clothing and absorbent paper should be sealed in a vapor-tight plastic bag for eventual disposal. Solvent-wash all contaminated surfaces with toluene followed by washing with a soap and water solution. Do not reenter the contaminated area until the Safety Officer (or other responsible person) has verified that the area has been properly cleaned.

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## **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**

This material should be stored in a refrigerator.

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

### **8.1 Control parameters**

#### **Occupational Exposure limit values**

TLV: 0.1 mg/m<sup>3</sup>, as TWA; 0.3 mg/m<sup>3</sup> as STEL; (skin)

#### **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 goggles, face shield or eye protection in combination with breathing protection.

**Skin protection**

Protective gloves. Protective clothing.

**Respiratory protection**

Use local exhaust or breathing protection.

**Thermal hazards**

no data available

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

<b>Physical state</b>	PHYSICAL DESCRIPTION: Pale yellow solid with an aromatic odor. (NTP, 1992)
<b>Colour</b>	Crystals from cyclohexane
<b>Odour</b>	Aromatic odor
<b>Melting point/freezing point</b>	185°C
<b>Boiling point or initial boiling point and boiling range</b>	440°C
<b>Flammability</b>	Noncombustible Solid
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	-18°C
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	Insoluble (NTP, 1992)
<b>Partition coefficient n-octanol/water</b>	log Kow = 8.5
<b>Vapour pressure</b>	5.01E-07mmHg at 25°C
<b>Density and/or relative density</b>	2
<b>Relative vapour density</b>	13.9 (air=1 at boiling point of octachloronaphthalene) (NTP, 1992) (Relative to Air)
<b>Particle characteristics</b>	no data available

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## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

Decomposes on heating. This produces toxic fumes including hydrogen chloride.

### **10.2 Chemical stability**

no data available

### **10.3 Possibility of hazardous reactions**

Not combustible Contact with strong oxidizing agents may cause fire and explosion (NTP, 1992).

### **10.4 Conditions to avoid**

no data available

### **10.5 Incompatible materials**

Contact with strong oxidizing agents may cause fire and explosion.

## 10.6 Hazardous decomposition products

The substance decomposes on heating producing toxic fumes (chlorine).

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## 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 may cause effects on the liver. This may result in tissue lesions.

### STOT-repeated exposure

The substance may have effects on the liver.

### Aspiration hazard

no data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

- 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

Octachloronaphthalene is reported to have "poor" biodegradability(1). Tetra to hexachlorinated naphthalenes showed no biodegradation during 28 day aerobic biodegradation experiments, although there is some evidence that lower chlorinated forms may biodegrade(2). In addition, a predictive method based upon evaluated biodegradation data and the fact that octachloronaphthalene contains 8 aromatic chlorine substructures predicts that octachloronaphthalene

### 12.3 Bioaccumulative potential

Bioconcentration factor in *Oncorhynchus mykiss*, exposure concentration  $1.3 \times 10^{-2}$  ug/L, 330

## 12.4 Mobility in soil

Using a structure estimation method based on molecular connectivity indices(1), the Koc for octachloronaphthalene can be estimated to be  $1.1 \times 10^5$ (SRC). According to a classification scheme(2), this estimated Koc value suggests that octachloronaphthalene is expected to be immobile in soil.

## 12.5 Other adverse effects

no data available

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## 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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## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: UN1145 (For reference only, please check.)

IMDG: UN1145 (For reference only, please check.)

IATA: UN1145 (For reference only, please check.)

### 14.2 UN Proper Shipping Name

ADR/RID: CYCLOHEXANE (For reference only, please check.)

IMDG: CYCLOHEXANE (For reference only, please check.)

IATA: CYCLOHEXANE (For reference only, please check.)

### 14.3 Transport hazard class(es)

ADR/RID: 3 (For reference only, please check.)

IMDG: 3 (For reference only, please check.)

IATA: 3 (For reference only, please check.)

### 14.4 Packing group, if applicable

ADR/RID: II (For reference only, please check.)

IMDG: II (For reference only, please check.)

IATA: II (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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## 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
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Octachloronaphthalene	Octachloronaphthalene	2234-13-1	218-778-7
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Korea Existing Chemicals List (KECL)</b>			Listed.

## SECTION 16: Other information

### Information on revision

**Creation Date** July 15, 2019  
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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/>

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

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