

# HANGZHOU OCEAN CHEMICAL CO., LTD

## SAFETY DATA SHEET

---

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : 4'-Hydroxyacetophenone  
CAS-No. : 99-93-4

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

Identified uses : Laboratory chemicals, Synthesis of substances

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

Company: HANGZHOU OCEAN CHEMICAL CO., LTD  
Address: Room12A04, Ocean Blue Fortune Center,318 Baishi Lane, Xiacheng Distrct  
Hangzhou,Zhejiang  
Telephone: +86-571-58116972  
Fax: +86-571-88025871

#### 1.4 Emergency telephone number

Emergency Phone # : +86 1801327712

---

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritation (Category 2A), H319  
Short-term (acute) aquatic hazard (Category 3), H402  
Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)  
H319  
H412

Causes serious eye irritation.  
Harmful to aquatic life with long lasting effects.

|                            |  |
|----------------------------|--|
| Precautionary statement(s) |  |
| P264                       | Wash skin thoroughly after handling.   |
| P273                       | Avoid release to the environment.  |
| P280                       | Wear 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. |
| P337 + P313                | If eye irritation persists: Get medical advice/ attention.   |
| P501                       | Dispose of contents/ container to an approved waste disposal plant.  |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |  |
|------------------|--|
| Formula          | : C <sub>8</sub> H <sub>8</sub> O <sub>2</sub> |
| Molecular weight | : 136.15 g/mol                                 |
| CAS-No.          | : 99-93-4                                      |
| EC-No.           | : 202-802-8                                    |

| Component                     | Classification  | Concentration |
|-------------------------------|---|---------------|
| <b>4'-Hydroxyacetophenone</b> |   |               |
|                               | Eye Irrit. 2A; Aquatic Acute 3; Aquatic Chronic 3; H319, H402, H412 | <= 100 %      |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 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. Move out of dangerous area.

#### 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.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

- 4.3 Indication of any immediate medical attention and special treatment needed**  
No data available

---

## **SECTION 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

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **5.4 Further information**

No data available

---

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

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.  
For personal protection see section 8.

### **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**

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

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

For disposal see section 13.

---

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

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

hygroscopic

Storage class (TRGS 510): 13: Non Combustible Solids

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

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

### **8.1 Control parameters**

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

Contains no substances with occupational exposure limit values.  
Hazardous components without 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**

Safety glasses with side-shields conforming to EN166 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.

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 and safety officer 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**

Impervious 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**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.  
Discharge into the environment must be avoided.

---

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

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

|   |   |
|---|---|
| a) Appearance                                   | Form: crystalline<br>Colour: beige                      |
| b) Odour  | No data available                                       |
| c) Odour Threshold                              | No data available                                       |
| d) pH   | No data available                                       |
| e) Melting point/freezing point                 | Melting point/range: 109 - 111 °C (228 - 232 °F) - lit. |
| f) Initial boiling point and boiling range      | 147 - 148 °C 297 - 298 °F at 4 hPa - lit.               |
| g) Flash point                                  | ( )No data available                                    |
| 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                              | No data available                                       |
| l) Vapour density                               | No data available                                       |
| m) Relative density                             | 1.109 g/cm <sup>3</sup>                                 |
| n) Water solubility                             | 10 g/l - soluble  |
| o) Partition coefficient: n-octanol/water       | No data available                                       |
| p) Auto-ignition 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

---

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

### **10.1 Reactivity**

No data available

## **10.2 Chemical stability**

Stable under recommended storage conditions.

## **10.3 Possibility of hazardous reactions**

No data available

## **10.4 Conditions to avoid**

Avoid moisture.

## **10.5 Incompatible materials**

Bases, Acid chlorides, Acid anhydrides, Oxidizing agents

## **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

---

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 2,240 mg/kg  
(US-EPA)

Inhalation: No data available

LD50 Dermal - Rabbit - > 2,000 mg/kg

#### **Skin corrosion/irritation**

Skin - Rabbit

Result: No irritation  
(US-EPA)

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: irritating  
(US-EPA)

Eyes - Rabbit

Result: Irritating to eyes.

#### **Respiratory or skin sensitisation**

Sensitisation test: - Guinea pig

Result: negative  
(US-EPA)

#### **Germ cell mutagenicity**

unscheduled DNA synthesis assay

Chinese hamster ovary cells Result:  
negative

Ames test

Salmonella typhimurium

Result: negative  
(ECHA)

US-EPA

Mouse - male and female - Bone marrow

Mouse

Result: negative

### **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.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

### **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

### **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - 90 d - No observed adverse effect level - 45 mg/kg

Subchronic toxicity

Repeated dose toxicity - Rat - male and female - Oral - 28 h - No observed adverse effect level - 600 mg/kg

Subacute toxicity RTECS:

AM8750000

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

---

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

|   |  |
|---|--|
| Toxicity to fish                                    | static test LC50 - Oncorhynchus mykiss (rainbow trout) - 25 mg/l - 96 h<br>(US-EPA)  |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 50 mg/l - 48 h<br>(US-EPA)           |
|   | Remarks: (Hommel)(4'-Hydroxyacetophenone)  |
| Toxicity to algae                                   | static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 11.8 mg/l - 72 h |

(US-EPA)

static test NOEC - Pseudokirchneriella subcapitata (green algae) - 2.8 mg/l - 72 h  
(US-EPA)

Toxicity to bacteria      static test EC20 - activated sludge - 130 mg/l - 3 h  
(OECD Test Guideline 209)

## **12.2 Persistence and degradability**

Biodegradability      aerobic - Exposure time 28 d  
Result: 93.2 % - Readily biodegradable.  
(OECD Test Guideline 301B)

## **12.3 Bioaccumulative potential**

No data available

## **12.4 Mobility in soil**

No data available

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## **12.6 Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

No data available

---

# **SECTION 13: Disposal considerations**

## **13.1 Waste treatment methods**

### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

### **Contaminated packaging**

Dispose of as unused product.

---

# **SECTION 14: Transport information**

## **DOT (US)**

Not dangerous goods

## **IMDG**

Not dangerous goods

## **IATA**

Not dangerous goods

---

# **SECTION 15: Regulatory information**



**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

|                        |                    |               |
|------------------------|--------------------|---------------|
| 4'-Hydroxyacetophenone | CAS-No.<br>99-93-4 | Revision Date |
|------------------------|--------------------|---------------|

**New Jersey Right To Know Components**

|                        |                    |               |
|------------------------|--------------------|---------------|
| 4'-Hydroxyacetophenone | CAS-No.<br>99-93-4 | Revision Date |
|------------------------|--------------------|---------------|

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

---

**SECTION 16: Other information****Further information**

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.

The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**Preparation Information**

HANGZHOU OCEAN CHEMICAL CO., LTD