



# Unilong Industry Co., Ltd

Add: No.2000 Shunhua Rd, High-Tech Zone , Jinan City, Shandong Province, China

## Chemical Safety Data Sheet

### 1.Product and Company Identification

Product name: 4,4'-bis(diethylamino)benzophenone

Details of the supplier of the safety data sheet:

Company name: Unilong Industry Co.,Ltd.

Address: No.2000 Shunhua Rd, High-Tech Zone, Jinan City, Shandong Province, China

Tel: +86 0531 55690071

### 2.Hazards identification

GHS classification

Skin irritation (category 2)

Eye irritation (Category 2A)

Specific target organ system toxicity (one exposure) (Category 3)

Acute Aquatic Toxicity (Category 1)

GHS marker elements, including precautionary statements



**GHS07**

**GHS09**

Hazard Statement

H315 causes skin irritation.

H319 causes severe eye irritation.

H335 may cause respiratory irritation.

H400 is extremely toxic to aquatic life.

Precautionary measures

P261 Avoid inhaling dust fumes/gases/fumes/vapors/sprays

P264 Thoroughly cleanse skin after procedure.

The P271 should only be used outdoors or in a well-ventilated area.

P273 Avoid release into the environment.

P280 Wear protective gloves/eye protection/face protection.

Incident response

P302+P352 In case of skin contact: Wash with plenty of soap and water.

P304+P340 For inhalation: Move the patient to fresh air to rest and keep breathing comfortable posture.

P305+P351+P338 In case of contact with eyes, rinse slowly and gently with water for a few minutes. If you wear contact lenses and can easily remove them, remove them and continue rinsing.

P312 If you feel unwell, call a poison control center or doctor.

P321 Specific disposition (see first aid guidance provided on this label).

P332+P313 If you feel skin irritation: seek medical advice/medical attention.



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P337+P313 If you still feel eye irritation: seek medical advice/medical attention

P362: Take off soiled clothes and wash them before reuse.

P391 collects the spill.

Store safely

P403+P233 should be stored in a well-ventilated place. Keep the container closed

P405 Storage must be locked.

Disposal

P501 Dispose of contents/containers to an approved waste treatment plant

Other hazards - none

### 3. Composition/information on ingredients

Chemical name: 4,4'-bis(diethylamino)benzophenone

Chemical Formula:  $C_{21}H_{28}N_2$

CAS:90-93-7

Molecular weight: 324.46 g/mol

### 4. First aid measures

Description of the necessary first aid measures:

General advice is to consult a doctor. Present this safety data sheet to the doctor who is present at the scene.

Inhale

If inhaled, move the patient to fresh air. If breathing stops, artificial respiration is given. Consult your doctor.

Skin-to-skin contact

Rinse with soap and plenty of water. Consult your doctor.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.

Ingestion

Never give anything to an unconscious person by mouth. Rinse your mouth with water. Consult your doctor.

Main symptoms and effects, acute and late effects:

To the best of our knowledge, this chemical, physical and toxic properties have not been fully studied.

Instructions and instructions for prompt medical care and special care required: no data available.

### 5. Fire fighting measures

Fire Hazard: Do not leave the product in a place with high temperatures and open flames, as this will cause combustion and explosion.

Fire extinguishing medium: Use water mist, anti-ethanol foam, dry powder or carbon dioxide fire extinguisher.

Special hazards arising from this substance or mixture: carbon oxides, nitrogen oxides.

Fire Instructions: Use a self-contained breathing apparatus to avoid inhaling irritating gases.



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Other information: No data available.

## 6. Accidental release measures

Protective measures, protective equipment and emergency response procedures for workers:  
Use personal protective equipment. Avoid dust generation. Avoid inhaling vapors, fumes, or gases  
Ensure adequate ventilation. Personnel evacuated to a safe area. Avoid inhaling dust.

Environmental Protection Measures:

If you can ensure safety, you can take steps to prevent further leaks or spills and keep the product out of the drain. Be sure to avoid emissions into the surrounding environment.

Methods of containment and removal of spilled chemicals and disposal materials used:

Do not generate dust during collection and disposal. Sweep and shovel off.

Place in a suitable closed container for disposal.

## 7. Handling and storage

Precautions for safe operation:

Avoid contact with skin and eyes. Avoid the formation of dust and aerosols. Where dust is generated, provide suitable exhaust equipment. General fire protection measures.

Conditions for safe storage, including any incompatibilities:

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place. Be sensitive to light and store away from light as much as possible.

## 8. Exposure controls/personal protection

Allowable concentration

Maximum permissible concentration

There are no known state-mandated exposure limits.

Exposure control

Appropriate technical controls

Operate in accordance with good industrial hygiene and safety practices. Wash your hands before breaks and at the end of work.

Personal protective equipment

Eye/face protection

Safety glasses with protective edges comply with EN166 requirements, please protect your eyes with equipment tested and approved by official standards such as NIOSH (USA) or EN 166 (EU).

Gloves must be inspected before use.

Please remove the gloves using an appropriate method (do not touch the outer surface of the gloves) and avoid any skin area coming into contact with the product.

After use, please dispose of contaminated gloves with caution in accordance with relevant laws and regulations and valid laboratory regulations. Wash and blow dry your hands.

The protective gloves selected must comply with EU Regulation 89/686/EEC and the EN 376 standard derived from it.

Full contact

Material: Nitrile rubber



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The minimum layer thickness is 0.11 mm

Solvent permeation time: 480 min

Substance tested: Dermatril(8) (KCL740/Z677272, size M)

Splash protection

Material: Nitrile rubber

The minimum layer thickness is 0.11 mm

Solvent permeation time: 480 min

Substances tested: Dermatril@ (KCL740/Z677272, Specification M), Test Method EN374.

If applied in solvent form or mixed with other substances, or under conditions different from those specified in EN374, please contact the supplier of the EC approved gloves.

This recommendation is only suggestive and must be evaluated and confirmed by an industrial hygienist who is familiar with the specific situation that our customer plans to use. This should not be construed as providing approval for any particular use situation.

Body protection

Impermeable clothing, the type of protective equipment must be selected according to the concentration and quantity of hazardous substances in a particular workplace.

Respiratory protection

For exposure to hazardous environments, use P95 (US) or P1 (EU, UK).

143) Anti-particulate respirators. For a higher level of protection, use an OV/AG/P99 (US) or ABEK-P2 (EU, UK 143) canister.

Respirators use respirators and parts that have been tested and passed government standards such as NIOSH (US) or CEN (EU).

## 9.Physical and chemical properties

Appearance and properties: light ivory solid powder

Odor: There is a slight odor

Odor threshold: No data available

pH: 4-6 (50g/l, H<sub>2</sub>O, 20°C)

Melting Point/Freezing Point: 89-92°C

Boiling point, initial boiling point and boiling range: no data available

Flash point: 151°C closed cup

Evaporation rate: No data available

Flammability (solids, gases): no data available

High/low flammability or explosiveness limits: no data available

Vapor pressure: no data available

Vapor density: No data available

Density/relative density (water = 1): 1.048±0.06 g/cm<sup>3</sup>

Solubility: insoluble in water, soluble in ethanol

N-Octanol/Water partition coefficient: no data available

Autoignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available



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## 10.Stability and reactivity

Response: No data available

Stability: No data available

Hazard reaction: No data available

Conditions to avoid: Luminescence

Incompatible substances: strong oxidizing agents

Hazard decomposition products: Other decomposition products - no data available

## 11.Toxicological information

Acute toxicity: no data available

Skin irritation or corrosion: No data available

Eye irritation or corrosion: no data available

Respiratory or skin allergies: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: No component in this product with a content greater than or equal to 0.1% has been identified by IARC (International Agency for Research on Cancer) as a probable or definite human carcinogen.

Reproductive toxicity: no data available

Specific target organ system toxicity (one-time exposure) inhalation: may cause respiratory irritation

Specific target organ system toxicity (repeated exposure): no data available  
inhalation hazards; No data available

Potential Health Impacts:

Inhalation can be harmful and cause respiratory irritation. Ingestion is harmful. Absorption through the skin can be harmful, causing skin irritation. Severe eye irritation.

## 12.Ecological information

Proper use and disposal in accordance with environmental requirements will not cause harm to the environment.

Ecotoxicity: no data available

Persistence and degradability: No data available

Potential bioaccumulation: no data available

Migration in soils: no data available

Evaluation of outcomes of PBT and vPyB: no data available

Other adverse effects: Extremely toxic to aquatic life.

## 13.Disposal considerations

Waste Disposal Method:

Leave leftover and non-recyclable materials to licensed companies for disposal.

Contact a professional licensed waste disposal agency to dispose of this substance.

It is dissolved or mixed with flammable solvents, burned in a chemical incinerator equipped with post-combustion treatment and scrubbing, and contaminated containers and packaging are



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disposed of as unused products.

If there are other provisions, it shall be handled in accordance with national laws and regulations or the relevant provisions of the place of use.

## 14. Transport Information

According to the International Maritime Organization (IMO) International Maritime Dangerous Goods Code (2018 Edition)

Explosion hazard identification: not an explosive

Flammable hazard identification: not flammable dangerous goods

Oxidation hazard identification: It does not belong to oxidants and organic peroxides

Identification of toxicity and infection risk: It does not belong to toxic substances and infectious substances

Radiological hazard identification: no radiological hazard

Corrosion hazard identification: not corrosive (Suggestion according to IMO Code)

It can be handled in accordance with the conditions of non-restricted goods

## 15. Regulatory Information

Special requirements are subject to the regulations of the place of use.

## 16. Other Information

Disclaimer: The information in this MSDS applies only to the product specified, unless otherwise stated, and does not apply to mixtures of this product with other substances. This MSDS only provides information on the safety of the use of the product for those who have been professionally trained to use the product. Users of this MSDS must make an independent judgment on the suitability of the MSDS under special conditions of use. In exceptional circumstances, the author of this MSDS will not be liable for any injury caused by the use of this MSDS.