

**SIGMA-ALDRICH**

**Material Safety Data Sheet**

Version 3.0  
Revision Date 07/13/2007  
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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : **Benzophenone**  
Product Number : B9300  
Brand : Sigma-Aldrich  
Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # : (314) 776-6555

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Diphenyl ketone  
Formula : C13H10O  
Molecular Weight : 182.22 g/mol

CAS-No.	EC-No.	Index-No.	Concentration [%]
<b>Benzophenone</b>			
119-61-9	204-337-6	-	-

**3. HAZARDS IDENTIFICATION**

**Emergency Overview**  
**OSHA Hazards**  
Irritant

**HMIS Classification**  
Health Hazard: 2  
Flammability: 1  
Physical hazards: 0

**NFPA Rating**  
Health Hazard: 2  
Fire : 1  
Reactivity Hazard: 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.

**Ingestion** May be harmful if swallowed.

**4. 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.

**5. FIRE-FIGHTING MEASURES**

**Flammable properties**  
Flash point 138 °C (280 °F) - closed cup

Ignition temperature no data available

**Suitable extinguishing media**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**  
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 dust. Ensure adequate ventilation.

**Environmental precautions**  
Do not let product enter drains. Discharge into the environment must be avoided.

**Methods for cleaning up**  
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Handling**  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

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

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

**Respiratory protection**  
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**  
Handle with gloves.

**Eye protection**

Safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form crystalline  
Colour white

**Safety data**

pH no data available  
Melting point 47 - 49 °C (117 - 120 °F)  
Boiling point 305 °C (581 °F)  
Flash point 138 °C (280 °F) - closed cup  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Vapour pressure 1 hPa (1 mmHg) at 108 °C (226 °F)  
Water solubility no data available  
Partition coefficient: log Pow: 3.18  
n-octanol/water

**10. STABILITY AND REACTIVITY****Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Strong oxidizing agents, Strong reducing agents

**Hazardous decomposition products****Hazardous decomposition products formed under fire conditions.**

Carbon oxides

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - > 10,000 mg/kg  
LD50 Dermal - rabbit - 3,535 mg/kg

**Irritation and corrosion**

no data available

**Sensitisation**

no data available

**Chronic exposure**

no data available

**Signs and Symptoms of Exposure**

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

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** May be harmful if swallowed.

**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

no data available

**Ecotoxicity effects**

Toxicity to fish mortality NOEC - Pimephales promelas (fathead minnow) - 5.86 mg/l - 7 d  
mortality LOEC - Pimephales promelas (fathead minnow) - 9.24 mg/l - 7 d  
LC50 - Pimephales promelas (fathead minnow) - 14.2 mg/l - 96 h  
Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 0.28 mg/l - 24 h

**Further information on ecology**

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**15. REGULATORY INFORMATION****OSHA Hazards**

Irritant

**TSCA Status**

On TSCA Inventory

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

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

**SARA 313 Components**

SARA 313: 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 Listed

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
Benzophenone	119-61-9	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
Benzophenone	119-61-9	

**California Prop. 65 Components**

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

**16. OTHER INFORMATION****Further information**

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