

Safety data sheet for chemical products, MSDS

Product name: Photoinitiator 1173

According to GB/T17519

Initial date of preparation: 2025/3/15

The revision date: 2026/1/1

Section 1 - Chemical and corporate identity

Product's information

Chemical name: 2-Hydroxy-2-methylpropiophenone

Supplier's information

Supplier: Guangzhou BAWO New Material Science Co., Ltd.

Tel: 86-020-31074363

Fax: 86-020-31074309

Emergency Contact Number: 86-020-31074363

Section 2 - Hazard Identification

Emergency Overview:

Pale yellow transparent liquid. Harmful if swallowed. Harmful to aquatic life with long lasting effects.

GHS of the substance or mixture

Acute toxicity (oral) Category 4

Hazardous to the aquatic environment (chronic) Category 3

GHS label elements, hazard statements and precautionary statement



Hazard pictogram:

Signal word: Warning

Hazard statements:

Harmful if swallowed. Harmful to aquatic life with long lasting effects.

Precautionary statements:

Prevention

P264 Wash skin thoroughly after handling;

P270 Do not eat, drink or smoke when using this product;

P273 Avoid release to the environment;

Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician;



P330 Rinse mouth.

Storage: Not applicable.

Disposal

P501 Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.

Physical and chemical hazards: Unknown.

Health hazards: Harmful if swallowed.

Environmental hazards: Harmful to aquatic life with long lasting effects.

Section 3 - Composition/Composition Information

Chemical characterization: substance.

Component	Concentration or concentration range [% quality score]	CAS No.
2-Hydroxy-2-methylpropiophenone	≥ 98.5%	7473-98-5

Section 4 - First-aid Measures

Recommended procedures:

Eye contact: In case of splashing into eyes, flush immediately with plenty of water and seek medical attention from an ophthalmologist right away.

Skin contact: Rinse the affected skin thoroughly with plenty of soapy water immediately. Remove all contaminated clothing. Seek medical treatment if symptoms are severe.

Inhalation: Remove the victim to fresh air and let them rest. Help the victim to a semi-upright position and loosen clothing for easier breathing. Administer artificial respiration if breathing becomes difficult. Transfer severely affected persons to hospital immediately.

Ingestion: Do not induce vomiting to avoid secondary hazards. Rinse the mouth with clean water or seek medical treatment promptly.

Advice for physicians :Inform medical staff of the involved substance. Take protective measures to avoid cross-contamination.

Section 5 - Fire-fighting Measures

Suitable extinguishing agent: 1.Form 2.Dry Powder 3.Water spray

Unsuitable extinguishing media: Do not use direct water streams, as they may spread the fire.

Fire precautions and protective measures:

Wear self-contained breathing apparatus and full protective clothing.

Special hazards: Toxic gases may be released during combustion.



Section 6 - Leakage Emergency Treatment

Personal protective measures, protective equipment and emergency procedures:

Emergency personnel shall wear protective clothing and oil-resistant rubber gloves. Use inert materials such as vermiculite, sand or earth to absorb the spilled material, then place the waste into a suitable container.

Environmental Attentions:

Prevent spilled material from entering sewers, drainage systems and soil.

Section 7 - Safety Operating Precautions and Storage

Precautions for handling:

Wear personal protective equipment. Avoid inhaling vapors and contact with eyes, skin and clothing. Ensure adequate ventilation in the workplace.

Precautions for storage:

Keep containers tightly closed after use. Store in a dry and well-ventilated area.

Section 8 - Contact Control/Personal Protection

Occupational exposure limit values: No information available.

Biological limit values: No information available.

Appropriate Engineering Controls:

1. Ensure adequate ventilation, especially in confined spaces.
2. Ensure that eyewash stations and safety showers are located near the work area.
3. Explosion prevention: Use explosion-proof electrical equipment, ventilation systems and lighting facilities.

Individual protection measures:

General requirement:



佩戴防护眼镜

Wear Eye Protection



穿戴防护服

Wear Protective Clothing



佩戴呼吸器

Wear Respirator



穿戴安全鞋

Wear Safety Footwear



佩戴面罩

Wear Face Shield



穿戴防护手套

Wear Protective Gloves

Respiratory protection: Wear NIOSH-approved respirator or mask.

Eye protection: Wear suitable safety goggles.

Hand protection: Nitrile polymer protective gloves are recommended.

Skin and body protection: Wear protective clothing and boots to protect arms, legs and the whole body.



Section 9 - The characteristics of physical and chemical

Appearance:	Pale yellow transparent liquid
Odor:	No data available
Melting point/Freezing point:	No melting point observed between -100 °C and 240 °C. Areproducible glass transition is detected at -60 °C.
pH:	No data available
Boiling point:	252.1 °C (101.3 kPa)
Flash point:	122 °C (101.3 kPa) (closed cup)
Upper explosion limit (vol%):	No data available
Lower explosion limit (vol%):	No data available
Vapor pressure (kPa):	0.006 hPa at 20 °C
Vapor density:	No data available
Relative density:	1076.7 kg/m ³ at 20 °C
Solubility:	13.3 g/L in water at 20 °C
Evaporation rate:	No data available
n-Octanol/water partition coefficient (Log Kow / Log Pow):	1.62 (25 °C)
Auto-ignition temperature:	446 °C (1013 hPa)
Decomposition temperature:	No data available
Flammability (solid, gas):	Non-flammable
Viscosity:	25 mPa·s (at 20 °C) / 8.2 mPa·s (at 40 °C)
Surface tension:	62.6 mN/m (20 °C, 1000 mg/L)
Dissociation constant in water (pKa):	13.2 (20 °C)

Section 10 - Stability and Reactivity

Stability: Stable in sealed containers at room temperature under normal storage conditions.

Hazardous reactions: No hazardous reactions occur under normal use conditions.

Conditions to avoid: Incompatible substances and direct sunlight.

Incompatible materials: Strong oxidizers, strong acids and strong bases.

Hazardous decomposition products: Carbon oxides are generated during combustion.

Section 11 - Toxicological information:

Acute toxicity:



LD50(oral,Rat): 1694 mg/kg

LD50(dermal,Rat): 6929 mg/kg

LC50(inhalation,Rat): No information

Skin irritation or corrosion: No classified

Eye irritation or corrosion: No classified

Respiratory or skin irritation: No classified

Germ cell mutagenicity: No classified

Carcinogenicity: This substance at concentrations above 0.1% is not classified as a carcinogen by IARC, NTP, OSHA or ACGIH.

Reproductive toxicity: No information

Specific target organ systemic toxicity-single exposure: No information

Specific target organ systemic toxicity-repeated exposure: No information

Inhalation hazards: No information

Section 12 - Ecological information

Acute toxicity:

Fish toxicity: LC50 (Fish, 48 h) : 160 mg/L

Invertebrate toxicity: EC50 (Daphnia, 48 h) : > 119 mg/L

Algae toxicity: EC50 (Algae, 72 h) : 1.95 mg/L

Chronic toxicity:

Fish toxicity: NOEC (Fish): No data available

Invertebrate toxicity: NOEC (Daphnia): No data available

Algae toxicity: NOEC (Algae, 72 h) : 0.194 mg/L

Persistence and degradability: This substance is readily biodegradable.

Bioaccumulation potential: Given $\log K_{ow} \leq 3$, the substance has low bioaccumulation potential.

Mobility in soil: $K_{oc} = 10.67$, $\log K_{oc} = 1.03$ at 20 °C. It is not expected to adsorb onto solid soil phase.

PBT & vPvB assessment: The substance is not classified as PBT or vPvB.

Other adverse effects: Harmful to aquatic organisms with long-term adverse effects.

Section 13 - Disposal considerations

Disposal method:

Waste chemical products: Recycle the material whenever possible. If recycling is not feasible, incinerate it in suitable equipment. Do not dispose of the product by land burial or discharge into sewers. Entrust recycling or reuse to qualified institutions, and comply with national and local regulations for disposal.



Contaminated packaging: Return to the manufacturer or dispose of in accordance with national and local regulations.

Disposal precautions: Refer to relevant national and local regulations prior to disposal.

For personal protection measures for disposal personnel, see Section 8.

Section 14 - Transportation information

	Highway transport (ADR/RID)	Maritime transport (IMDG)	Air transport (ICAO/IATA)
UN number	None	None	None
United nations transport name	None	None	None
United nations classification of hazards	None	None	None
Categories of packing	None	None	None
Transport in bulk according to IMO instruments	None	None	None
Environmental hazards	NO	NO	NO

Transport precautions

1. Do not transport together with oxidizers and food chemicals.
2. Protect the product from direct sunlight and rain during transportation.
3. Keep away from ignition sources and heat sources during stops.
4. Transport vehicles shall be equipped with appropriate types and quantities of fire-fighting equipment and spill response devices.

Section 15 - Regulatory information

The management of this chemical is governed by the following laws, regulations, rules and standards:

Law of the People's Republic of China on the Prevention and Control of Occupational Diseases

List of Occupational Hazard Factors: Not listed

Regulations on the Safety Management of Hazardous Chemicals

Catalog of Hazardous Chemicals: Not listed

Regulations on Labor Protection in Workplaces Using Toxic Substances

Catalog of Highly Toxic Substances: Not listed

Measures on Environmental Management of New Chemical Substances

Inventory of Existing Chemical Substances in China: Listed

International chemical inventory

EINECS/ELINCS: Listed



TSCA:	Listed
KECI:	Listed
AICS:	Listed
DSL:	Listed
ENCS:	Listed

Section 16 - Other information

Write and edit information:

The safety technical specifications have been revised according to the requirements of UN GHS. (9th revision)

The revision date: 2026/1/1

Important disclaimer:

The data of the company is currently known data, according to the product under normal use, list must pay attention to matters, suggest the user to enable before, should read this data, help to the safe use and correct waste management. Please contact business technical staff if you have any doubts. But this data does not ensure that extended to processed products, whether have you made with materials processing, the user should be aimed at its product testing or certification to fully comply with relevant laws and regulations and requirements of the client, especially special purposes, such as the application of medicine, in case of any dispute and should not belong to the company's liability.

Data maker: Guangzhou BAWO New Material Science Co.,Ltd

