Safety Data Sheet

According to GB/T 16483 and GB/T 17519

Version: 2.0/EN
Trade name: BPO-75W

Revision date: 10/04/2024
Printing date: 10/04/2024

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: BPO-75W
Product description: Dibenzoyl peroxide , 75% granules mixed with water.

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

Relevant identified uses: Polymerization initiator.
Uses advised against: Industrial use only.

1.3 Details of the supplier of the SDS

Supplier(manufacturer): Nantong Kezhong Chemical Technology Co., Ltd.
Address: Matang Town,Nantong City
Web: https://www.kz-opchem.com/
Telephone: +86-513-84188686

1.4 Emergency telephone number

Call the emergency number: +86-532-83889090

SECTION 2: HAZARDS IDENTIFICATION

2.1 GHS Classification

Organic peroxide, Type C
Serious eye damage/ eye irritation, Category 2A
Skin sensitization, Category 1
Acute aquatic toxicity, Category 1
Chronic aquatic toxicity, Category 1

2.2 GHS Label elements

Hazard pictograms



Signal word: Danger.

Hazard statements:
H242: Heating may cause a fire.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P220: Keep/Store away from reducing agents (e.g.amines) , acids, alkalies , dirt, rust, and combustible materials.
P234: Keep only in original container.
P261: Avoid breathing dust.
P264: Wash hands and contaminated skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P304+P340: IF INHALED:Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P302+P352: IF ON SKIN:Wash with plenty of soap and water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.Remove contact lenses, if present and easy to do. Continue rinsing.
P362: Take off contaminated clothing and wash before reuse.
P337 + P313: If eye irritation persists: Get medical advice/attention.
P370+P378: In case of fire: Use waterspray, foam, sand, dry chemical powder and CO2 for extinction.

Storage P411: Store at temperatures not exceeding 40 °C.
P403+P235: Store in a well-ventilated place.Keep cool.
P233: Keep container tightly closed.
P410: Protect from sunlight.
P420: Store away from other materials.
P405: Store locked up.

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

Supplemental Hazard information:

No information available.

Special rules for supplemental label elements for certain mixtures:

No information available.

2.3 Other hazards

No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Description of the mixture

This product is a free flowing granular form of water damped diacyl peroxide.

3.2 Composition / information on ingredients

Name	CAS No.	EC No.	Weight [% w/w]	Classification according to Regulation
Dibenzoyl peroxide	94-36-0	202-327-6	75%	Organic peroxide, Type B Serious eye damage/ eye irritation, Category 2A Skin sensitization, Category 1 Acute aquatic toxicity, Category 1 Chronic aquatic toxicity, Category 1
Water	7732-18-5	231-791-2	25%	Not classified.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General informations:

In all cases of doubt, or when symptoms persist, seek medical attention.

In case of inhalation:

Remove to fresh air. If not breathing, give artificial respiration.
Oxygen may additionally be given, by trained personnel, if it is available. Get medical attention if symptoms occur.

In case of skin contact:

Remove contaminated clothing while protecting yourself.
Whilst protecting yourself, relocate the casualty away from the source of danger.
Rinse the affected skin areas for 10 minutes under running water. Arrange medical treatment.

In case of eye contact:

First rinse with plenty of water for several minutes (remove contact lenses if easily possible).
Rinse the affected eye with widely spread lids for 10 minutes under running water whilst protecting the unimpaired eye.
Irrespective of absent or subjective or visible irritation, immediate transport to an eye doctor/to hospital is required.

In case of ingestion:

Rinse mouth. Give one or two glasses of water to drink.

Call a physician or a poison control center immediately. Induce vomiting only if directed by medical personnel.

The patient should lie on their left side while vomiting to reduce the risk of aspiration.

Never give anything by mouth to an unconscious or convulsing person.

Notes for the doctor:

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material. Attending physician should treat exposed patients symptomatically.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects: Irritating to eyes. May cause sensitization by skin contact.

4.3 Indication of the immediate medical attention and special treatment needed

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material. Attending physician should treat exposed patients symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, sand,alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media: Halones.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:
carbon dioxide, carbon monoxide, benzoic acid, benzene.

5.3 Advice for fire-fighters

Firefighters must wear fire resistant protective equipment. Wear approved respirator and protective gloves.

Evacuate all non-essential personnel. Cool closed containers with water.

Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition.

Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

After a fire, ventilate thoroughly the area and soak with water, clean the walls and metallic surfaces.

5.4 Additional information

CAUTION: reignition may occur. Decomposition under effect of heating
(See also Section Hazardous decomposition products).
If involved in a fire, it will support combustion. dust explosion hazard. Vapours may form explosive mixtures with air.
In case of fire and/or explosion do not breathe fumes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin and eyes.
Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

6.2 Environmental precautions

Do not allow to enter drains or water courses.

6.3 Methods and material for containment and cleaning up

Stop leakage if possible. Eliminate all sources of ignition, and do not generate flames or sparks.
Sweep up and put it into a container for disposal. Avoid dust generation.
Keep contents moist. The waste should NOT be confined. Flush surroundings with large amounts of water and soap.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information

CAUTION: reignition may occur. Evacuate personnel to safe area.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Never weigh out in the storage room. When using do not eat, drink or smoke. Do not breathe dust.
Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks.
Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal soaps).Keep product and emptied container away from heat and sources of ignition.
Confinement must be avoided. Do not allow to dry out. Avoid contact with skin and eyes. Avoid Incompatible materials.

Fire and explosion prevention:

Use explosion protected equipment. Keep away from sources of ignition - No smoking. Avoid dust generation.
Do not cut or weld on or near this container even when empty.
Blanketing the product with nitrogen reduces the flammability, but is not fully effective above 55°C.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Store in accordance with local/national regulations. Keep away from food, drink and animal feedingstuffs.
Store in a dry well ventilated place away from sources of heat and direct sunlight.
Store separate from other chemicals. Keep only in the original container. For maximum quality store below: 30 °C.

Further information on storage conditions:

It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded.
Wash hands thoroughly after handling or contact. Keep working clothing separately and do not take them home.

7.3 Specific end use(s)

No special requirements.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limit values: Dibenzoyl peroxide (CAS# 94-36-0)

Country	Limit value - Eight hours	Limit value - Short term
Austria	5 mg/m³ (inhalable aerosol)	10 mg/m³ (inhalable aerosol)
Belgium	5 mg/m³	-
Canada	5 mg/m³	-
Denmark	5 mg/m³	10 mg/m³
France	5 mg/m³	-
Germany (AGS)	5 mg/m³ (inhalable aerosol)	5 mg/m³ (inhalable aerosol)
Germany (DFG)	5 mg/m³ (inhalable aerosol)	5 mg/m³ (inhalable aerosol)
Hungary	5 mg/m³	5 mg/m³
Spain	5 mg/m³	-
Switzerland	5 (inhalable aerosol)	5 mg/m³ (inhalable aerosol)
USA - NIOSH	5 mg/m³	-
USA - OSHA	5 mg/m³	-
United Kingdom	5 mg/m³	-

8.2 Exposure controls

Appropriate engineering controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Ensure good ventilation and local exhaustion of the working area.
Use adequate ventilation to keep airborne concentrations low.

Explosion proof ventilation recommended.

Individual protection measures - personal protective equipment:

Eye/face protection:	Face shield and safety glasses.
Skin protection:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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).

Environmental exposure controls:

Do not allow product to reach ground water, water bodies or sewage system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Granules
Colour:	White
Odour:	Faint
Melting point:	Not applicable.
Boiling point:	Not applicable (Decomposes)
Flash point:	Not applicable.
Vapour pressure:	Not applicable.
Density:	0.63 g/m^3, at 20°C
Solubility in Water:	Insoluble.
Solubility in other solvents:	Soluble in most organic solvents and phthalates.
Active oxygen content:	Approx. 4.95%
Self accelerating decomposition temperature (SADT):	80°C
Partition coefficient:	Log Pow: 3.46 (HSDB)

9.2 Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Contact with incompatible substances can cause decomposition at or below the SADT 80 °C.

10.2 Chemical stability

SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the following temperature: 80 °C. Contact with incompatible substances can cause decomposition at or below the SADT 80 °C.

10.3 Possibility of hazardous reactions

Contact with incompatible materials such as acids, alkalies, heavy metals and reducing agents will result in hazardous decomposition.

10.4 Conditions to avoid

To maintain quality store in original closed container below: 30 °C.

Avoid shock and friction. Confinement must be avoided. Do not allow to dry out. Explosive when dry.

10.5 Incompatible materials

Avoid contact with rust, iron and Copper.
Contact with incompatible materials such as acids, alkalies, heavy metals and reducing agents will result in hazardous decomposition.
Do not mix with peroxide accelerators. Use only Stainless steel 316, PVC, polyethylene or glass-lined equipment.

10.6 Hazardous decomposition products

Benzoic acid, benzene.

10.7 Other information

Polymerization does not occur.
Emergency procedures will vary depending on conditions. The customer must have an emergency response plan in place. contact NANTONG KEZHONG for assistance with developing an emergency response plan.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution

No data available.

11.2 Information on toxicological effects

Acute toxicity:

CAS#: 94-36-0 — Oral, rat: LD_{50} = 7710 mg/kg (HSDB); Inhalation, rat: LD_{50} > 24.3 mg/l/4h.

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation:

Eyes, rabbit: Irritations (HSDB).

Respiratory or skin sensitization:

Sensitization possible by skin contact.

CMR effects (Carcinogenicity, Mutagenicity and Toxicity for Reproduction):

No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, and OSHA.

STOT-single exposure and repeated exposure:

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

Aspiration hazard:

No data available.

Additional Information

RTECS#: DM8575000 (*CAS# 94-36-0*)

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity	Effect dose	Exposure time	Species	Method
Acute fish toxicity	LC_{50} = 2.0 mg/l	96 h	Poecilia reticulata	Other
Acute daphnia toxicity	EC_{50} = 2.91 mg/l	48 h	Daphnia	Other
Acute bacteria toxicity	EC_{50} = 35 mg/l	-	Activated sludge	Respiration inhibition test

12.2 Persistence and degradability

Biodegradation: 83%/21d (MITI test). Readily biodegradable.

12.3 Bioaccumulative potential

Distribution: Log Pow = 3.46 (HSDB);
An appreciable bioaccumulation potential is to be expected (Log Pow >3).

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Due to the high risk of contamination recycling/recovery is not recommended. Waste disposal in accordance with regulations (most probably controlled incineration).
Contaminated packaging: According to local regulations. Emptied container might retain product residues. Follow all warnings even after the container is emptied.
Additional information: Observe all federal, state, and local environmental regulations. For further advice contact +86-513-84110288.

SECTION 14: TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

UN-No.:	3104
Official transport designation:	ORGANIC PEROXIDE TYPE C, SOLID (Contain dibenzoyl peroxide)
Class:	5.2
Classification Code:	P1
Packing group:	II
Hazard label:	5.2

14.2 Sea transport (IMDG-Code/GGVSee)

Proper Shipping Name:	ORGANIC PEROXIDE TYPE C, SOLID (Contain dibenzoyl peroxide)
Class:	5.2
UN-No.:	3104
Packing group:	II
EmS:	F-J, S-R
Marine Pollutant:	No

14.3 Air transport (ICAO-TI/IATA-DGR)

Proper Shipping Name:	ORGANIC PEROXIDE TYPE C, SOLID (Contain dibenzoyl peroxide)
Class:	5.2
UN-No.:	3104
Packing group:	II

14.4 Additional information

No data available.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

CAS #	*EU-EINECS*	*US-TSCA*	*Canada-DSL*	*Australia-AICS*	*Korea-ECL*
94-36-0	Listed	Listed	Listed	Listed	Listed
7732-18-5	Listed	Listed	Listed	Listed	Listed

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for the product by the supplier.

SECTION 16: OTHER INFORMATION

16.1 Revision Information:

Date of the previous revision: Not applicable.
Date of this revision: 10/08/2021.
Revision summary: New SDS.

16.2 Abbreviations and acronyms

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
CLP: EU regulation (EC) No 1272/2008 on classification, labelling and packaging of chemical substances and mixtures.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
IMDG: International Maritime Code for Dangerous Goods.
IARC: International agency for research on cancer.
ICAO: International Civil Aviation Organization.
IECSC: Inventory of existing chemical substances in China.
OSHA: The United States Occupational Safety and Health Administration.
EINECS: European Inventory of Existing Commercial Chemical Substances.
TSCA: The American Toxic Substances Control Act.
DSL: The Canadian Domestic Substances List.
AICS: The Australian Inventory of Chemical Substances.
ECL: the Korean Existing Chemicals List.
HSDB: Hazardous Substances Data Bank .

16.3 Declare to reader

The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. According to REACH Article 31(5), the SDS shall be supplied in an official language of the Member State(s) where the substance or mixture is placed on the market, unless the recipient Member State(s) concerned provide otherwise. It should also be noted that this SDS is applicable to the countries with English as an official language.

---------- End of the SDS ----------