



Safety data sheet for chemical products, SDS

Product name: BW 8099C

According to GB/T 16483-2008, GB/T 17519-2013

Initial date of preparation: 2021/1/20

The revision date: 2021/11/10

Section 1 - Chemical and corporate identity

Chemical name: Urethane acrylate

Supplier: Guangzhou BAWO New Material Science Co.,Ltd

Tel: 86-020-31074363

Fax: 86-020-31074309

Section 2 - Hazards identification

Summary of emergencies:

Colorless liquids, large amount of heat is released during polymerization, the enormous pressure generated may cause the container to break, steam can irritate eyes, mucosa and skin. High concentration can cause dizziness. Emergency treatment and medical follow-up are needed

GHS risk category:

Flammable Liquid	Category 3
Skin irritation	Category 2
reproduction toxicity	Category 2
Specific target organ toxicity(single exposure)	Category 3
Specific target organ toxicity(repeated exposure)	Category 2
Harmful aquatic environment (Acute hazard)	Category 2
Harmful aquatic environment (long term hazard)	Category 3

GHS label elements:

Pictogram:



Signal word: Warning

Hazard Statement:

H226-Flammable liquid and vapor

H315-Causes skin irritation

H312-Harmful in contact with skin



H332- Harmful if inhaled

Section 3 - Composition/composition information

<u>Component</u>	<u>Concentration or concentration [% quality score]</u>	<u>CAS NO.</u>
Urethane acrylate	95~98%	---
N-butyl acetate	2-5%	123-86-4

Section 4 - First aid measures

First aid methods:

Eye contact: Remove or absorb excess chemicals as soon as possible; immediately open your eyelids, gently rinse them with flowing warm water for 5 minutes or until the pollutants are removed; and send them to the doctor immediately.

Inhalation: Remove the source of pollution or move the patient to fresh air, and send the patient to the doctor in time.

Skin contact: Remove contaminated clothes, shoes and leather products (such as watches and belts) as soon as possible, erase or absorb excess chemicals as soon as possible, rinse completely with water and non-abrasive soap for 20 minutes or until the chemicals are removed; seek medical treatment immediately.

Intake: When the patient is about to lose consciousness or unconscious wait, do not feed anything; do not vomit, give the patient 240-300 ml of water to dilute the compounds in the stomach, and send the patient to the doctor in time.

Tips to doctors: Slight skin irritation, skin will be red and swollen.

For the protection of emergency personnel:

- 1、Emergency workers please execute emergency alert zone。
- 2、For into the alert zone ambulance, please in accordance with section 8 exposure prevention measures in personal protective equipment instructions, wear appropriate protective equipment.

Section 5 - Fire control measures

Suitable extinguishing agent:

- 1、CO₂
- 2、Chemical powder
- 3、Bubble

Fire precautions and protective measures:

The danger of fire could meet:



- 1、 Stop spills before putting out fires. If you can't stop spills and there are no dangerous things around, let the spills burn out.
- 2、 If the fire is extinguished without stopping the spill, the steam may form an explosive mixture with the air and ignite again.

Special risk:

- 1、 Flammable liquids will produce toxic gases such as carbon monoxide and carbon dioxide when burned.
- 2、 In the fire field, the increase of the internal pressure of the vessel is dangerous of cracking and explosion.

Special protective equipment of firefighters: Comprehensive type shield, breathing protector, acid-resistant gloves protective clothing.

Section 6 - Accidental release measure

Work personnel protective measures, protective equipment and emergency disposal procedures:

- 1、 Wear appropriate personal protective equipment
- 2、 Prohibiting the entry of unrelated persons
- 3、 Recognize that trained personnel are responsible for cleaning up

Environmental protection:

- 1、 Remove all fire
- 2、 Containment leak, absorb with sand/earth
- 3、 Keep the environment ventilation
- 4、 Avoid into sewers and ditch

Cleaning method: Incineration or safe landfill.

Section 7 - Handling and storage

Operational considerations:

- 1、 Stay away from high temperature and fire
- 2、 Avoid eye and skin contact
- 3、 Do not inhale the steam

Storage precautions:

- 1、 Do not store with oxide
- 2、 Should be stored in ventilated place



3、Avoid high temperature and sunlight

Section 8 - Exposure controls/personal protection

Occupational exposure limits

Hazardous ingredient	Regulation	Type	Exposure limits (mg /m ³)
N-butyl acetate	Solvent handbook GBZ 2.1-2007	MAC	300
		PC-TWA	200
		PC-STEL	300

Individual protective equipment:

Respiratory protection:

- 1、Organic gas filter tank
- 2、Respiratory protective devices

Hand protection: Nitrile gloves

Eye protection:

- 1、Splash proof goggles
- 2、Full cover

Skin and body protection:

- 1、Eye irrigator
- 2、Emergency shower equipment
- 3、Permeation resistant clothing. Gloves, long sleeved shirt and pants

Health measures::

- 1、Remove the contaminated clothes quickly after work, and then wear or discard them after washing, and inform the laundrymen of the harmfulness of the contamination.
- 2、Smoking or diet are strictly prohibited in the workplace
- 3、Wash your hands thoroughly after handling this.
- 4、Maintaining clean workplace

Section 9 - Physical and chemical properties

Appearance and shape: Transparent clear liquid	Critical temperature (°C): inapplicability
pH : no information	Critical pressure (Pa): inapplicability
Melting point (°C): no information	Spontaneous combustion temperature (°C): inapplicability



The boiling point (°C): no information	Decomposition temperature (°C): no information
Flash point (°C): 46 (closed cup)	Heat of combustion (kJ/mol): no information
Explosion limit (% volume fraction): inapplicability	The evaporation rate: inapplicability
Lower explosion limit(%volume fraction): inapplicability	Flammability (solid, gas): no information
Saturated vapor pressure (kPa): inapplicability	Viscosity (mPa.s): 500~1200 (cps at 25°C)
Relative density (water by 1): 1.03±0.02 g/cm ³ (at 25°C)	Odor thresholds: Microsolvent odor
Relative vapor density (air by 1): inapplicability	Solubility : It is insoluble in water and soluble in ester
Water alcohol/water distribution coefficient (lg P): no information	

Section 10 - Stability and reactivity

Stability: Stable under normal conditions of use and storage

Adverse reactions may occur under special circumstances: The reaction of the heat release polymerization and the pressure sealing container will burst or burst open

Material to avoid: More than 60°C is stored, exposed to sunlight, and the polymerization inhibitor fails

Prohibited content: Peroxide

Hazardous decomposition products: CO₂, CO

Section 11 - Toxicological information:

Acute toxicity: N-butyl acetate

LD50: (rat oral): 10768 mg/kg (rabbit skin): 17600 mg/kg

LC50: (rat inhalation, 4h): 390 g/m³

Skin irritation or corrosion: Rabbit skin: 500mg(24h), moderate stimulation

Eye irritation or corrosion: Rabbit eyes: 20 ppm, severe stimulation

Respiratory or skin irritation: No information

The reproductive cells are mutagenic: No information

Carcinogenicity: No information

Reproductive toxicity: No information

Specific target organ systemic toxicity - single exposure: No information

Specific target organ systemic toxicity - repeated exposure: Cat inhaled 4200 ppm/m³ for 6 hours a day , 5 days later, with mild change in red blood , weakness, loss weight.

Inhalation hazards: No information

Section 12 - Ecological information

Ecotoxicity: N-butyl acetate



LC50: 100 mg/L (96h bluegill)

EC50: 18 mg/L (48h daphnia)

TLM: 44 mg/L (48th water flea)

IC50: 280 mg/L (72h alga)

Persistence and degradation:

Biodegradability: no information

Non-biodegradability: In air, when the concentration of hydroxyl radicals is $5.0 \times 10^5 / \text{CM}^3$, the degradation half-life is 4d (theoretical).

Potential bioaccumulation: According to Kow value, the bioaccumulation of this substance may be weak.

Migration of soil: According to K_{OW} values, it is predicted that the substance may have some mobility.

Section 13 - Disposal considerations

Pollution package: Return the container to the manufacturer or dispose of it in accordance with national and local regulations.

Waste disposal method:

- 1、Processing by reference to relevant laws and regulations
- 2、Storage of wastes to be treated in accordance with storage conditions
- 3、Special incineration or sanitary burial methods can be used for treatment.

Section 14 - Transportation information

	Highway transportation (ADR/RID)	Maritime transport (IMDG)	Air transport (ICAO/IATA)
UN number	1866	1866	1866
United nations transport name	Resin solution	Resin solution	Resin solution
United nations classification of hazards	3	3	3
Categories of packing	III	III	III
Marine pollutant	NO	NO	NO

Instruction:

- 1、The transport vehicles should be equipped with the corresponding number of fire fighting equipment and emergency leakage equipment.



- 2、It is forbidden to use mechanical equipment and tools that are easy to spark.
- 3、It is forbidden to mix with oxidizer, acid, strong alkali and edible chemicals.
- 4、The packing should be complete during shipment, and the loading should be safe.
- 5、Product should prevent exposure to the sun, rain, and high temperature during transportation. The best time to transport is the morning and evening.
- 6、During the stopover, it should stay away from the fire, heat source and high temperature area.

Section 15 - Regulatory information

Conform to the list of chemicals (Chemical Inventories):

Applicable laws and regulations: labor safety and sanitation rules, general rules of the hazard substances and hazardous substances, organic solvent poisoning prevention rules and labor standard harmful material allowable concentration in the air, the working environment of road traffic safety regulations, business store clear standard processing methods and devices.

Status of international registration of chemical substances:

China(IECSC): Listed

Section 16 - Other Information

Write and edit information:

The safety technical specifications have been revised in 16 content formats with reference to GB/T 17519-2013 / chemical safety technical specifications.

The revision date: 2022/11/10

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

