

Safety data sheet for chemical products, SDS

Product name: BW 8027-2

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

Initial date of preparation: 2024/9/9

The revision date: 2026/1/1

Section 1 - Chemical and corporate identity

Product's information

Chemical name: Urethane Acrylate

Supplier's information

Supplier: Guangzhou BAWO New Material Science Co.,Ltd

Tel: 86-020-31074363

Fax: 86-020-31074309

Section 2 - Hazards identification

Emergency Overview:

A colorless transparent liquid that releases substantial heat during polymerization, potentially generating high pressure and causing container rupture. Its vapors can irritate the eyes, mucous membranes, and skin. High concentrations may cause dizziness. Immediate first aid and subsequent medical follow-up are required.

GHS of the substance or mixture

GHS risk category:

Flammable Liquid Category 3

Specific target organ toxicity(single exposure) Category 3

Hazardous to the aquatic environment - Acute hazard Category 3

GHS label elements, hazard statements and precautionary statement

GHS label elements:



Pictogram:

Signal word: Warning

Hazard Statement:

H226 Flammable liquid and vapor

H336 May cause drowsiness or dizziness

H402 Harmful to aquatic life



Section 3 - Composition/composition information

Component	Concentration or concentration range [% quality score]	CAS NO.
Urethane acrylate	82- 88%	-
Butyl acetate	12 - 18%	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, seek medical treatment immediately.

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 spillage continues after the fire is extinguished, vapor may mix with air to form an explosive mixture, potentially causing re-ignition.



For the protection of firefighters:

Full face shield, respiratory protection, protective 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)
Butyl acetate	GBZ 2.1-2007	MAC	300
		PC-TWA	200
		PC-STEL	300

Biological contact Limits: No standard established.

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:	Clear to slightly turbid liquid
pH:	No information
Melting point (°C):	No information
The boiling point (°C):	No information
Flash point (°C):	48 (closed cup)
Explosion limit (% volume fraction):	Inapplicability
Lower explosion limit(%volume fraction):	Inapplicability
Saturated vapor pressure (kPa):	Inapplicability
Relative density (water by 1):	1.08 ± 0.02 g/cm ³ (at 25°C)
Relative vapor density (air by 1):	Inapplicability
Water alcohol/water distribution coefficient (lg P):	No information
Critical temperature (°C):	Inapplicability
Critical pressure (Pa):	Inapplicability
Spontaneous combustion temperature (°C):	Inapplicability
Decomposition temperature (°C):	No information
Heat of combustion (kJ/mol):	No information
The evaporation rate:	Inapplicability
Flammability (solid, gas):	No information
Viscosity (mPa.s):	800 ~ 1,500 (cps at 25°C)
Odor thresholds:	Micromonomeric odour
Solubility:	It is insoluble in water and soluble in ester



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 100F is stored, exposed to sunlight, and the polymerization inhibitor fails

Prohibited content: Peroxide

Hazardous decomposition products: CO₂, CO

Section 11 - Toxicological information:

Acute toxicity: Butyl acetate

LD₅₀: (rat, oral): 10768 mg/kg (rabbit, dermal): > 17600 mg/kg

LC₅₀: (rat, inhalation, 4h): 390 g/m³

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

Eye irritation or corrosion : Rabbit, eyes: 200ppm, severe irritation

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 per day for 5 days, resulted in weakness, body weight loss, and mild hematological changes.

Inhalation hazards: No information

Section 12 - Ecological information

Ecotoxicity: Butyl acetate

LC₅₀: 100 mg/L (96h, Bluegill sunfish) EC₅₀: 18 mg/L (48h, Fathead minnow)

TLm: 44 mg/L (48h, Water flea) IC₅₀: 280 mg/L (72h, Algae)

Persistence and degradation:

Biodegradability: No information

Non-biodegradability: In air, theoretical half-life for degradation is 4 days at a hydroxyl radical concentration of 5.0×10^5 molecules/cm³.

Potential bioaccumulation: Based on the predicted log K_{ow} value, the bioaccumulation potential of this substance is estimated to be low.



Migration of soil: Based on the predicted log Kow value, this substance is expected to be readily transported in the environment.

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: 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

