



SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name : Benzaldehyde
CAS No. : 100-52-7

Manufacturer or supplier's details

Company : Heynova (Shanghai) New Material Technology CO., Ltd
Address : Building 3, No. 690 Bibo Road, Pudong New Area, Shanghai, China
Telephone : +86-178-2110-2608
E-mail address : info@heynovachem.com

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance : liquid
Color : colorless - yellow

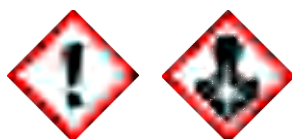
Combustible liquid. Harmful if swallowed. Causes skin and eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. May cause damage to organs (Nervous system). Causes damage to organs (Nervous system) through prolonged or repeated exposure. Toxic to aquatic life.

GHS Classification

Flammable liquids : Category 4
Acute toxicity (Oral) : Category 4
Skin corrosion/irritation : Category 2
Serious eye damage/eye irritation : Category 2B
Skin sensitization : Category 1
Germ cell mutagenicity : Category 2
Specific target organ toxicity - single exposure : Category 2 (Nervous system)
Specific target organ toxicity - single exposure : Category 3 (respiratory tract irritation, Narcotic effects)
Specific target organ toxicity - repeated exposure : Category 1 (Nervous system)
Short-term (acute) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :



Signal Word : Danger



Hazard Statements	: H227 Combustible liquid. H302 Harmful if swallowed. H315 + H320 Causes skin and eye irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H341 Suspected of causing genetic defects. H371 May cause damage to organs (Nervous system). H372 Causes damage to organs (Nervous system) through prolonged or repeated exposure. H401 Toxic to aquatic life.
Precautionary Statements	: Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P302 + P352 IF ON SKIN: Wash with plenty of water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Physical and chemical hazards

Combustible liquid.

Health hazards

Harmful if swallowed. Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction. Suspected of causing genetic defects. May cause damage to organs. May cause respiratory irritation. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure.

Environmental hazards

Toxic to aquatic life.



Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	CAS RN	Concentration (% w/w)
Benzaldehyde	100-52-7	98

4. FIRST AID MEASURES

If inhaled : Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/ physician.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off with plenty of water.
Call a POISON CENTER or doctor/ physician.

In case of eye contact : Rinse with plenty of water.
If easy to do, remove contact lens, if worn.
Call a POISON CENTER or doctor/ physician.

If swallowed : Call a POISON CENTER or doctor/ physician.
Rinse mouth.

Most important symptoms and effects, both acute and delayed : None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry powder, Foam, Water spray, Carbon dioxide (CO₂)

Specific hazards during fire fighting : No information available.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Immediately evacuate personnel to safe areas.
Remove undamaged containers from fire area if it is safe to do so.

Special protective equipment for fire-fighters : Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
Keep people away from and upwind of spill/leak.
Ensure adequate ventilation.
Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions : Prevent product from entering drains.

Methods and materials for containment and cleaning up : Collect as much of the spill as possible with a suitable absorbent material.



7. HANDLING AND STORAGE

Handling

Technical measures	: Prevent generation of vapor or mist. Take precautionary measures against static discharge. Use explosion-proof equipment.
Local/Total ventilation	: Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Use a local exhaust ventilation.
Advice on safe handling	: Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding, shock or friction. Wash hands and face thoroughly after handling. Confirm in advance if peroxides exist when operations involving heating such as distillation are carried out.
Avoidance of contact	: Oxidizing agents, Reducing agents, Bases, Oxygen, Aluminum, Iron

Storage

Conditions for safe storage	: Keep container tightly closed. Store in a cool and shaded area. Keep in a well-ventilated place. Keep under inert gas. Store locked up. Avoid exposure to light.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	: Install a closed system or local exhaust. Also install safety shower and eye bath.
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Personal protective equipment

Respiratory protection	: Gas mask Self-contained breathing apparatus
Eye/face protection	: Safety glasses Safety goggles Face-shield
Skin and body protection	: Impervious protective clothing
Hand protection	: Impervious gloves

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colorless - yellow
Odor	: No data available

Odor Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	-56 °C
Boiling point/boiling range	:	179 °C
Flash point	:	62 °C
Evaporation rate	:	No data available
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	13.5 %(V)
Lower explosion limit / Lower flammability limit	:	1.4 %(V)
Vapor pressure	:	130 Pa (26 °C)
Relative vapor density	:	3.65
Relative density	:	1.05
Solubility(ies)		
Water solubility	:	3 g/l very slightly soluble (25 °C)
Solubility in other solvents	:	very soluble Solvent: Ether
		very soluble Solvent: Alcohol
		very soluble Solvent: Benzene
		very soluble Solvent: Acetone
Partition coefficient: n-octanol/water	:	1.48
Autoignition temperature	:	190 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Molecular weight	:	106.12 g/mol

10. STABILITY AND REACTIVITY

Reactivity	:	No data available
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Reacts with air to form peroxides.
Conditions to avoid	:	Electrical spark Open flame



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Exposure to air.
Exposure to light.

Incompatible materials : Oxidizing agents, Reducing agents, Bases, Oxygen, Aluminum, Iron

Hazardous decomposition products : Carbon monoxide, Carbon dioxide (CO₂)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

Components:

Benzaldehyde:

Acute oral toxicity : LD₅₀ (Mouse): 28 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

LD₅₀ (Rat): 1,300 mg/kg

Acute toxicity (other routes of administration) : LD₅₀ (Mouse): 9 mg/kg
Application Route: Intraperitoneal injection

LDLo (Rat): 5 g/kg
Application Route: Subcutaneous

Skin corrosion/irritation

Product:

Result : Skin irritation

Components:

Benzaldehyde:

Result : Skin irritation

Serious eye damage/eye irritation

Product:

Result : Mild eye irritation

Components:

Benzaldehyde:

Result : Mild eye irritation

Respiratory or skin sensitization

Product:

Assessment : May cause sensitization by skin contact.

Components:

Benzaldehyde:

Assessment : May cause sensitization by skin contact.



Germ cell mutagenicity

Product:

Germ cell mutagenicity - Assessment : Suspected of inducing heritable mutations in the germ cells of humans.

Components:

Benzaldehyde:

Germ cell mutagenicity - Assessment : Suspected of inducing heritable mutations in the germ cells of humans.

Carcinogenicity : No information available.

Reproductive toxicity : No information available.

STOT-single exposure

Product:

Assessment : May cause respiratory irritation.
May cause drowsiness or dizziness.

Target Organs : Nervous system
Assessment : May cause damage to organs.

Components:

Benzaldehyde:

Assessment : May cause respiratory irritation.
May cause drowsiness or dizziness.

Target Organs : Nervous system
Assessment : May cause damage to organs.

STOT-repeated exposure

Product:

Target Organs : Nervous system
Assessment : Causes damage to organs through prolonged or repeated exposure.

Components:

Benzaldehyde:

Target Organs : Nervous system
Assessment : Causes damage to organs through prolonged or repeated exposure.

Repeated dose toxicity : No information available.

Aspiration toxicity : No information available.

RTECS No. : CU4375000 (Benzaldehyde)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.



Components:

Benzaldehyde:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Persistence and degradability

No data available

Bioaccumulative potential

Components:

Benzaldehyde:

Partition coefficient: n-octanol/water : 1.48

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Disposal in accordance with local and national regulations.
Take precautions against ignition or explode.
Entrust disposal to a licensed waste disposal company.

Contaminated packaging : Disposal in accordance with local and national regulations.
Before disposal of used container, remove contents completely.

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 1990
Proper shipping name : Benzaldehyde
Class : 9
Packing group : III

IMDG-Code

UN number : UN 1990
Proper shipping name : BENZALDEHYDE
Class : 9
Packing group : III
EmS Code : F-A, S-A

Domestic regulation

GB 6944/12268

UN number : UN 1990
Proper shipping name : BENZALDEHYDE
Class : 9
Packing group : III

15. REGULATORY INFORMATION



The ingredients of this product are reported in the following inventories:

CH BAGREG	: On the inventory, or in compliance with the inventory
TSCA	: All substances listed as active on the TSCA inventory
AICS	: On the inventory, or in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

Revision Date : 2024/10/04
Date format : yyyy/mm/dd

Disclaimer

This SDS was prepared sincerely based on the information obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling operations, sufficient care should be taken, in addition to the safety measures suitable for the given situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.