

SAFETY DATA SHEET

(According to Regulation (EC) No. 1907/2006)

SDS Version: 1.1-Eng Product: Benzaldehyde FCC Grade

Creation Date: 2014-10-31

Revision Date: 2020-04-20

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/

UNDERTAKING

1.1 Product identifiers

Product name : Benzaldehyde FCC Grade

CAS-No. : 100-52-7

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

Identified uses : Intermediate for fine chemical manufacture

1.3 Details of the supplier of the safety data sheet

Company : Hangzhou Better Chemtech Ltd.
Room 802, Building 1, Hanzhiyun Commercial Center,
No 33 Shenhua Road, Hangzhou, China

E-mail address : info@betterchemtech.com

1.4 Emergency telephone number

Emergency Phone # : +86 571 87680096

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids (Category 4)

Acute toxicity, oral, acute toxicity, dermal and acute toxicity, inhalation (Category 4) Skin
corrosion/irritation (Category 2)

Sensitization, skin (Category 1)

Serious eye damage/eye irritation (Category 2A)

Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3)

Hazardous to the aquatic environment-acute (Category 2) **Classification according to EU**

Directives 67/548/EEC or 1999/45/EC Xn Harmful

R22 Harmful if swallowed.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word

Warning

Hazard statement(s)

H227 Combustible liquid.

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes severe eye irritation.

H335 May cause respiratory irritation.

H401 Toxic to aquatic life.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

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

P271 Use only outdoors or in a well-ventilated area.

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P370+P378 In case of fire: Use sand, alcohol-resistant foam, dry chemical powder or carbon dioxide to extinguish.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P321 Specific treatment (Reference to supplemental Safety Data Sheets).

P312 Call a POISON CENTER/ doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: 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.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

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

Supplemental Hazard Statements: None

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrase(s)

R22 Harmful if swallowed. S-phrase(s)

None

2.3 Other hazards – None.

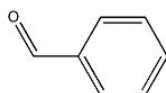
3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula : C₇H₆O

Molecular Weight : 106.12 g/mol

Index No: 605-012-00-5



Structure:

Concentration: 99.0%

Synonyms: Artificial essential oil of almond

Component	Concentration
Benzaldehyde	
CAS-No: 100-52-7	≥99.0%
EC-No: 202-860-4	
Index-No: 605-012-00-5	

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by

wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Store under nitrogen. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Air, light, and moisture sensitive.

7.3 Specific end uses

No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Respiratory protection.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form:	Colourless liquid
b) Odour:	Bitter almonds
c) Odour Threshold:	No data available
d) pH:	5.9 at 20 °C
e) Melting point/freezing point:	-26 °C - lit.
f) Initial boiling point and boiling range:	179 °C - lit.
g) Flash point:	64 °C - closed cup
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper/lower flammability or explosive limits:	Upper explosion limit: 8.5 %(V) Lower explosion limit: 1.4 %(V)
k) Vapour pressure:	5 hPa at 45 °C

l) Vapour density:	3.66 - (Air = 1.0)
m) Relative density:	1.045 g/cm ³ at 25 °C
n) Water solubility:	slightly soluble
o) Partition coefficient: noctanol/water:	log Pow: 1.5
p) Autoignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

9.2 Other safety information

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Air Exposure to moisture. Light. Heat Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents, Strong reducing agents, Strong bases, Alkali metals, Aluminium, Iron, phenols, Oxygen

10.6 Hazardous decomposition products

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute

toxicity

LD50 Oral - mouse -1300mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Coma. LD50

Dermal - rabbit - 1250 mg/kg

Skin corrosion/irritation

Skin - rabbit - Slightly skin irritation - 24 h - Draize Test

Serious eye damage/eye irritation

Eyes - rabbit

Result: Mild eye irritation

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available **Aspiration**

hazard No data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin Harmful if absorbed through skin. Causes skin irritation.

Signs and Symptoms of Exposure

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

Additional Information

RTECS: CU4375000

Central nervous system depression, Prolonged or repeated exposure to skin causes defatting and dermatitis.

Liver - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - *Lepomis macrochirus* - 1,07 mg/l - 96 h

mortality LOEC - Pimephales promelas (fathead minnow) - 0,45 mg/l - 7 d mortality
NOEC - Pimephales promelas (fathead minnow) - 0,22 mg/l - 7 d LC50 - Leuciscus idus
(Golden orfe) - 62 mg/l - 48 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 50 mg/l - 24 h

12.2 Persistence and degradability

Biodegradability Biotic/Aerobic - Exposure time 28 d

Result: 95 % - Readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1990

IMDG: 1990

IATA:1990

14.2 UN proper shipping name

ADR/RID: BENZALDEHYDE

IMDG: BENZALDEHYDE

IATA: Benzaldehyde

14.3 Transport hazard class(es)

ADR/RID:9

IMDG:9

IATA: 9

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No.1907/2006.

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product Hangzhou Better Chemtech Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.betterchemtech.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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