

Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Benzaldehyde		
Mol.formula	C7H6O	Cas no	100-52-7
Mol.wt	106,12 g/mol		
Manufacture name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Address	Area 540, Industrial Zone 6 th October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		
Phone number	+201225728304 , +201023932115		

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn Harmful R22

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word	Warning
Hazard statement(s) H302	Harmful if swallowed.
Precautionary statement(s)	none
Supplemental Hazard	none

Statements

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Artificial essential oil of almond

Formula : C₇H₆O

Molecular Weight : 106,12 g/mol

CAS-No. : 100-52-7

EC-No. : 202-860-4

Index-No. : 605-012-00-5

Hazardous ingredients according to Regulation (EC) No 127 2/2008

Component		Classification	Concentration
Benzaldehyde			
CAS-No.	100-52-7	Acute Tox. 4; H302	<= 100 %
EC-No.	202-860-4		
Index-No.	605-012-00-5		

Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
Benzaldehyde			
CAS-No.	100-52-7	Xn, R22	<= 100 %
EC-No.	202-860-4		
Index-No.	605-012-00-5		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

no data available

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.

SECTION 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.

SECTION 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.

For precautions see section 2.2.

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 use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 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.

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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: liquid Colour: colourless
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	5,9 at 20 °C
e) Melting point/freezing point	Melting point/range: -26 °C - lit.
f) Initial boiling point and boiling range	176 - 183 °C - lit.
g) Flash point	no data available
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	1,044 -1.047g/cm ³ at 20 °C
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	log Pow: 1,5
p) Auto-ignition temperature	no data available
q) Decomposition	no data available

temperature

- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available

9.2 Other safety information

Relative vapour density 3,66 - (Air = 1.0)

SECTION 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
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 1.300 mg/kg

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

LD50 Dermal - rabbit - 1.250 mg/kg

Skin corrosion/irritation

Skin - rabbit

Result: Skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - rabbit

Result: Mild eye irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

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

Additional Information

RTECS: CU4375000

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

Liver - Irregularities - Based on Human Evidence

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish	LC50 - <i>Lepomis macrochirus</i> - 1,07 mg/l - 96 h
	mortality LOEC - <i>Pimephales promelas</i> (fathead minnow) - 0,45 mg/l - 7 d
	mortality NOEC - <i>Pimephales promelas</i> (fathead minnow) - 0,22 mg/l - 7 d
	LC50 - <i>Leuciscus idus</i> (Golden orfe) - 62 mg/l - 48 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - <i>Daphnia magna</i> (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.

no data available

SECTION 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.

SECTION 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

14.4 Packaging group

ADR/RID: III

IMDG: 9

IATA: 9

14.5 Environmental hazards

ADR/RID: no

IMDG: III

IATA: III

14.6 Special precautions for user

no data available

IMDG Marine pollutant: no

IATA: no

SECTION 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

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.

Acute toxicity

H302

Harmful if swallowed.

Full text of R-phrases referred to under sections 2 and 3

Xn

Harmful

R22

Harmful if swallowed.