	<b>MATERIAL SAFETY DATA SHEET</b>	MSDS No.	M-02
	BENZALDEHYDE	Effective From	17/02/2021

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

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

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

Identified uses: Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company: Bloomchemag BV  
Sint-Antoniusstraat 16 b1  
B-2400, Mol, Belgium  
Telephone: +91 72919 74484 / 72919 74050  
E-mail: [info@bloomchemag.com](mailto:info@bloomchemag.com)

REACH Registration No.	012119455540 44 XXXX
Date of Issue	28 <sup>th</sup> June 2019
Tonnage Band	Over 1000 tonnes/ year
Type of Registration	Full Registration
REACH Only Representative	REACH24H Consulting Group
UUID	ECHA-e7b0ef93 e5dd 4182 ba96 f2fd3dc9f805

## 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.

### 2.2 Label elements

#### Labeling according Regulation (EC) No. 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s) H302

Harmful if swallowed.

Precautionary Statement(s)


none

Supplemental Hazard Statements

none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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### SECTION 3: Composition/information on ingredients 3.1 Substances

Synonyms: Benzaldehydeffc

Formula: C<sub>7</sub>H<sub>6</sub>O

Component	Classification	Concentration
Benzaldehyde		
CAS-No. 100-52-7	Acute Tox. 4; Skin Irrit. 2;	≤ 100%
EC-No. 202-680-4	H302, H312, H315	
Index-No. 605-012-00-5		

Molecular Weight: 106,12 g/mol

#### Hazardous ingredients according to Regulation (EC) No. 1272/2008

For the full text of the H-Statements 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 importance known symptoms and effects are described in the labeling(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.

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## 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.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors 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 vapor or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the buildup 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.

Storage class(TRGS 510): Non Combustible Liquids.

### 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

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## 8.1 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.

Full contact

Material: Butyl- rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Material tested: Butoject®

Splash contact

Material: Chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 35 min

Material tested: Camapren®

data source: KCL GmbH, D-36124 Eichenzell

test method: EN374

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 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(US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering protection, use a full-face supplied air respirator. Use respirator and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

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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 Color: colorless
b)	Odor	No data available
c)	Odor 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	178 -179 ° 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)	Vapor pressure	4mmHg at 45° C
l)	Vapor density	3.66 - (Air = 1.0)
m)	Relative density	1.045g/cm <sup>3</sup> at 25 ° C
n)	Water solubility	slightly soluble
o)	Partition coefficient: n-octanol/water	log Pow: 1.5
p)	Auto-ignition 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

Relative vapor density	3.66 - (Air = 1.0)
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

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**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

Hazardous decomposition products formed under fire conditions.-Carbon oxides 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(Benzaldehyde)

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

LD50 Dermal - Rabbit - 1,250 mg/kg(Benzaldehyde)

**Skin corrosion/irritation**

Skin - Rabbit (Benzaldehyde)

Result: Skin irritation - 24 h

**Serious eye damage/eye irritation**

Eyes - Rabbit(Benzaldehyde)

Result: Mild eye irritation

**Respiratory or skin sensitization**

**Germ cell mutagenicity**

Laboratory experiments have shown mutagenic effects.(Benzaldehyde)

This product is or contains a component that is not classifiable as to its classification.(Benzaldehyde) 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(Benzaldehyde).


**Specific target organ toxicity - single exposure**

No data available(Benzaldehyde).

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

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No data available(Benzaldehyde)

### Additional Information

RTECS: CU4375000

Central nervous system depression, Prolonged or repeated exposure to skin causes defatting and Dermatitis.(Benzaldehyde)

Liver - Irregularities - Based on Human Evidence(Benzaldehyde)

## SECTION12: Ecological information

### 12.1 Toxicity

Toxicity to fish

LC50 - Lepomis macrochirus - 1.07 mg/l - 96 h(Benzaldehyde)  
 mortality LOEC - Pimephales promelas (fathead minnow) - 0.45 mg/l -7  
 d(Benzaldehyde)  
 mortality NOEC - Pimephales promelas (fathead minnow) - 0.22 mg/l -7  
 d(Benzaldehyde)

Toxicity to daphnia and  
 other aquatic  
 Invertebrates

LC50 - Leuciscus idus (Golden orfe) - -62 mg/l - 48h(Benzaldehyde)  
 EC50 - Daphnia magna (Water flea) - 50 mg/l - 24 h(Benzaldehyde)

### 12.2 Persistence and degradability

Biodegradability

Biotic/Aerobic - Exposure time 28 d(Benzaldehyde)  
 Result: 95 % - Readily biodegradable.

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available(Benzaldehyde)

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and Toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 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.

