

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Benzyl alcohol

Product Number : 402834  
Brand : Sigma-Aldrich

Supplier : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

Target Organ Effect, Harmful by ingestion., Harmful by skin absorption., Irritant

##### Target Organs

Central nervous systemCentral nervous system

##### GHS Classification

Acute toxicity, Oral (Category 4)  
Acute toxicity, Inhalation (Category 4)  
Acute toxicity, Dermal (Category 4)  
Skin irritation (Category 2)  
Acute aquatic toxicity (Category 2)

##### GHS Label elements, including precautionary statements

Pictogram



Signal word : Warning

Hazard statement(s)

H302 + H312 : Harmful if swallowed or in contact with skin  
H315 : Causes skin irritation.  
H332 : Harmful if inhaled.  
H401 : Toxic to aquatic life.

Precautionary statement(s)

P280 : Wear protective gloves/ protective clothing.

##### HMIS Classification

Health hazard: 2  
Chronic Health Hazard: \*  
Flammability: 1  
Physical hazards: 0

**NFPA Rating**  
**Health hazard:** 2  
**Fire:** 1  
**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** Harmful if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Ingestion** Harmful if swallowed.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Benzenemethanol

Formula : C<sub>7</sub>H<sub>8</sub>O

Molecular Weight : 108.14 g/mol

| Component              | Concentration |
|------------------------|---------------|
| <b>Benzyl alcohol</b>  |               |
| CAS-No. 100-51-6       | -             |
| EC-No. 202-859-9       |               |
| Index-No. 603-057-00-5 |               |

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**4. FIRST AID MEASURES**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**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**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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**5. FIREFIGHTING MEASURES**

**Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

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

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

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

**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.

## Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas. hygroscopic

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

| Components     | CAS-No.  | Value | Control parameters | Basis   |
|----------------|----------|-------|--------------------|---|
| Benzyl alcohol | 100-51-6 | TWA   | 10 ppm             | USA. Workplace Environmental Exposure Levels (WEEL) |

### Personal protective equipment

#### 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).

#### Hand 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.

##### Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M)

##### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, 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 hygienist and safety officer 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.

#### Eye 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 and 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.

#### Hygiene measures

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

|        |               |
|--------|---------------|
| Form   | liquid, clear |
| Colour | colourless    |

### Safety data

|  |  |
|--|--|
| pH                                     | no data available  |
| Melting point/freezing point           | Melting point/range: -16 - -13 °C (3 - 9 °F)   |
| Boiling point                          | 203 - 205 °C (397 - 401 °F)  |
| Flash point                            | 96 °C (205 °F) - closed cup  |
| Ignition temperature                   | 436 °C (817 °F)  |
| Auto-ignition temperature              | no data available  |
| Lower explosion limit                  | no data available  |
| Upper explosion limit                  | no data available  |
| Vapour pressure                        | 5.00 hPa (3.75 mmHg) at 77 °C (171 °F)<br>17.7 hPa (13.3 mmHg) at 100 °C (212 °F)<br>0.125 hPa (0.094 mmHg) at 25 °C (77 °F) |
| Density                                | 1.045 g/mL at 25 °C (77 °F)  |
| Water solubility                       | 33 g/l at 20 °C (68 °F)  |
| Partition coefficient: n-octanol/water | log Pow: 1.1   |
| Relative vapour density                | 3.73<br>- (Air = 1.0)  |
| Odour                                  | no data available  |
| Odour Threshold                        | no data available  |
| Evaporation rate                       | no data available  |

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## 10. STABILITY AND REACTIVITY

### Chemical stability

hygroscopic Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

A mixture of benzyl alcohol and 58% sulfuric acid decomposed violently when heated to 180°C. Benzyl alcohol containing 1.4% hydrogen bromide and 1.1% of an iron(II) salt polymerized exothermally when heated above 100°C.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

### Oral LD50

LD50 Oral - rat - 1,230 mg/kg

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

### Inhalation LC50

no data available

### Dermal LD50

LD50 Dermal - rabbit - 2,000 mg/kg

### Other information on acute toxicity

no data available

## Skin corrosion/irritation

Skin - rabbit - Irritating to skin. - 24 h

## Serious eye damage/eye irritation

no data available

## Respiratory or skin sensitisation

no data available

## Germ cell mutagenicity

no data available

## 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

no data available

## Teratogenicity

no data available

## Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

## Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

## Aspiration hazard

no data available

## Potential health effects

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | May be harmful if inhaled. Causes respiratory tract irritation. |
| <b>Ingestion</b>  | Harmful if swallowed.   |
| <b>Skin</b>       | Harmful if absorbed through skin. Causes skin irritation.       |
| <b>Eyes</b>       | Causes eye irritation.  |

## Signs and Symptoms of Exposure

stupor, narcosis

## Synergistic effects

no data available

**Additional Information**

RTECS: DN3150000

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 10 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 55 mg/l - 24 h

**Persistence and degradability**

Biodegradability Biotic/Aerobic  
Result: 92 - 96 % - Readily biodegradable.

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

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**13. DISPOSAL CONSIDERATIONS**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

UN number: 3334 Class: 9  
Proper shipping name: Aviation regulated liquid, n.o.s. (Benzyl alcohol)  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

Not dangerous goods

**IATA**

UN number: 3334 Class: 9 Packing group: III  
Proper shipping name: Aviation regulated liquid, n.o.s. (Benzyl alcohol)

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**15. REGULATORY INFORMATION**

**OSHA Hazards**

Target Organ Effect, Harmful by ingestion., Harmful by skin absorption., Irritant

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

|                | CAS-No.  | Revision Date |
|----------------|----------|---------------|
| Benzyl alcohol | 100-51-6 | 1993-04-24    |

**Pennsylvania Right To Know Components**

|                | CAS-No.  | Revision Date |
|----------------|----------|---------------|
| Benzyl alcohol | 100-51-6 | 1993-04-24    |

**New Jersey Right To Know Components**

|                | CAS-No.  | Revision Date |
|----------------|----------|---------------|
| Benzyl alcohol | 100-51-6 | 1993-04-24    |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**16. OTHER INFORMATION****Further information**

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