

## Material Safety Data Sheet

Version 4.0  
Revision Date 02/26/2010  
Print Date 02/26/2011

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Benzyl alcohol  
 Product Number : 305197  
 Brand : Sigma-Aldrich  
 Company : Sigma-Aldrich  
 3050 Spruce Street  
 SAINT LOUIS MO 63103  
 USA  
 Telephone : +18003255832  
 Fax : +18003255052  
 Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

## Emergency Overview

## OSHA Hazards

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

## Target Organs

Central nervous system

## 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)

P261 Avoid breathing dust/fume/gas/mist/vapours/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.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P322 Specific measures (see supplemental first aid instructions on this label).  
 P330 Rinse mouth.  
 P332 + P313 If skin irritation occurs: Get medical advice/attention.  
 P362 Take off contaminated clothing and wash before reuse.  
 P501 Dispose of contents/container to an approved waste disposal plant.

## HMIS Classification

Sigma-Aldrich - 305197  
Delivery 0838051590-000010 Purchase Order 40314A

Health hazard: 2  
 Chronic Health Hazard: 1  
 Flammability: 1  
 Physical hazards: 1

## NFPA Rating

Health hazard: 2  
 Fire: 1  
 Reactivity Hazard: 1

## 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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Benzenemethanol  
 Formula : C<sub>7</sub>H<sub>6</sub>O  
 Molecular Weight : 108.14 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Benzyl alcohol			
100-51-6	202-859-9	603-057-00-5	-

## 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

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

## If swallowed

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

## 5. FIRE-FIGHTING MEASURES

## Suitable extinguishing media

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

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions

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

## Environmental precautions

Do not let product enter drains.

## 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.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid inhalation of vapour or mist.  
Normal measures for preventive fire protection.

### Conditions for safe storage

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

Handle and store under inert gas. hygroscopic

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Benzyl alcohol	100-51-6	TWA	10 ppm	2008-01-01	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.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### 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 -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)  
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)  
17.7 hPa (13.3 mmHg) at 100 °C (212 °F)  
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: log Pow: 1,1  
n-octanol/water  
Relative vapour density 3.73  
- (Air = 1.0)

## 10. STABILITY AND REACTIVITY

### Chemical stability

hygroscopic Stable under recommended storage conditions.

### 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

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 1,230 mg/kg

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

LD50 Dermal - rabbit - 2,000 mg/kg

### Skin corrosion/irritation

Skin - rabbit - Skin irritation - 24 h

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

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

### Specific target organ toxicity - single exposure (GHS)

no data available

### Specific target organ toxicity - repeated exposure (GHS)

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.  
**Eyes** Causes eye irritation.

**Signs and Symptoms of Exposure**

Central nervous system depression

**Additional Information**

RTECS: DN3150000

**12. ECOLOGICAL INFORMATION**

**Toxicity**

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 10 mg/l - 96 h  
Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 55 mg/l - 24 h  
and other aquatic invertebrates.

**Persistence and degradability**

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

**Bioaccumulative potential**

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

**13. DISPOSAL CONSIDERATIONS**

**Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**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  
Proper shipping name: Aviation regulated liquid, n.o.s. (Benzyl alcohol)

**15. REGULATORY INFORMATION**

**OSHA Hazards**

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

**DSL Status**

All components of this product are on the Canadian DSL list.

**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.

**16. OTHER INFORMATION**

**Further information**

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