# **Material Safety Data Sheet**

Version 4.0 Revision Date 02/26/2010 Print Date 08/29/2011

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Benzyl alcohol

Product Number : 402834 Brand : Sigma-Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 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**

Health hazard: 2

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Chronic Health Hazard: \*
Flammability: 1
Physical hazards: 1

**NFPA Rating** 

Health hazard: 2
Fire: 1
Reactivity Hazard: 1

#### **Potential Health Effects**

InhalationMay be harmful if inhaled. Causes respiratory tract irritation.SkinHarmful 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>8</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

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# 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

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n-octanol/water

Relative vapour 3.73

density - (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.

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**Eyes** 

Causes eye irritation.

# Signs and Symptoms of Exposure

stupor, narcosis

Additional Information RTECS: DN3150000

#### 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**

### 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.

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# **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.	<b>Revision Date</b>	
Benzyl alcohol	100-51-6	1993-04-24	
Pennsylvania Right To Know Components			
•	CAS-No.	<b>Revision Date</b>	
Benzyl alcohol	100-51-6	1993-04-24	
New Jersey Right To Know Components			
	CAS-No.	<b>Revision Date</b>	
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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