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
Chronic Health Hazard: *
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**: \( \text{C}_7\text{H}_8\text{O} \)

**Molecular Weight**: 108.14 g/mol

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
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<tbody>
<tr>
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<td>202-859-9</td>
<td>603-057-00-5</td>
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</table>

### 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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
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</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>TWA</td>
<td>10 ppm</td>
<td>2008-01-01</td>
<td>USA. Workplace Environmental Exposure Levels (WEEL)</td>
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</table>

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

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
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.
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

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Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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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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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.