

# SAFETY DATA SHEET

## 1. PRODUCT

### 1.1 Product identifiers

Name: Benzyl alcohol

CAS-No.: 100-51-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302


Acute toxicity, Inhalation (Category 4), H332

Eye irritation (Category 2A), H319

Acute aquatic toxicity (Category 2), H401

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	H302 + H332 Harmful if swallowed or if inhaled H319 Causes serious eye irritation. 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 eye protection/ face protection. P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. P501 Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

May form explosive peroxides.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms: Benzenemethanol  
Formula:  $C_7H_8O$   
Molecular weight: 108.14 g/mol  
CAS-No.: 100-51-6

**Hazardous components**

Component	Classification	Concentration
<b>Benzyl alcohol</b>		
	Acute Tox. 4; Eye Irrit. 2A; Aquatic Acute 2; H302 + H332, H319, H401	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

<b>General advice</b>
Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>If inhaled</b>
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>In case of skin contact</b>
Wash off with soap and plenty of water. Consult a physician.
<b>In case of eye contact</b>
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>If swallowed</b>
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 important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.2 Indication of any immediate medical attention and special treatment needed**

No data available

**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable extinguishing media**

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

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

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

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

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

### 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

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

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

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

Handle and store under inert gas. hygroscopic

Storage class (TRGS 510): Combustible liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Benzyl alcohol	100-51-6	TWA	10.000000 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

### 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. 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: 43 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.
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 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).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Form: liquid, clear Colour: colourless
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: -16 - -13 °C (3 - 9 °F)
Initial boiling point and boiling range	203 - 205 °C (397 - 401 °F)
Flash point	96 °C (205 °F) - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	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)
Vapour density	3.73 - (Air = 1.0)
Relative 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 log Pow: 1.05 at 20 °C (68 °F)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

### 9.2 Other safety information

Surface tension: 39 mN/m at 20 °C (68 °F)

Relative vapour density: 3.73 - (Air = 1.0)

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

hygroscopic

Stable under recommended storage conditions.

Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 1 year.

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 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.

## 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

# 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

<b>Acute toxicity</b>	
LD50 Oral - Rat - 1,230 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Excitement. Behavioral:Coma. LD50 Oral - Rat - male - 1,620 mg/kg Dermal: No data available No data available	
<b>Skin corrosion/irritation</b>	
Skin - Rabbit Result: No skin irritation - 24 h (OECD Test Guideline 404)	
<b>Serious eye damage/eye irritation</b>	
Eyes - Rabbit Result: Eye irritation - 24 h (OECD Test Guideline 405)	
<b>Respiratory or skin sensitisation</b>	
No data available	
<b>Germ cell mutagenicity</b>	
No data available	
<b>Carcinogenicity</b>	
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.	
<b>Reproductive toxicity</b>	
No data available No data available	
<b>Specific target organ toxicity -single exposure</b>	
No data available	
<b>Specific target organ toxicity -repeated exposure</b>	
No data available	
<b>Aspiration hazard</b>	
No data available	
<b>Additional Information</b>	
RTECS: DN3150000 Central nervous system depression Liver - Irregularities - Based on Human Evidence Liver - Irregularities - Based on Human Evidence	

# 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

Toxicity to fish	LC50 - Lepomis macrochirus (Bluegill) - 10 mg/l - 96 h LC50 - Pimephales promelas (fathead minnow) - 460 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 55 mg/l - 24 h - Daphnia magna (Water flea) - 230 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae	No data available
Toxicity to bacteria	No data available

## 12.2 Persistence and degradability

Biodegradability	Biotic/Aerobic - Exposure time 28 d Result: 92 - 96 % - Readily biodegradable aerobic Biochemical oxygen demand - Exposure time 7 d Result: 92 - 96 % - Readily biodegradable (OECD Test Guideline 301C)
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## 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

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

Toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Product</b>
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated packaging</b>
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 3334 Class: 9

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

Reportable Quantity (RQ):

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)

## 15. REGULATORY INFORMATION

### SARA 302 Components

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

### SARA 313 Components

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

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

### Pennsylvania Right To Know Components

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

### New Jersey Right To Know Components

Component	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

### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity

Eye Irrit. Eye irritation

H302 Harmful if swallowed.

H302 + H332 Harmful if swallowed or if inhaled

H319 Causes serious eye irritation.

### HMIS Rating

Health hazard: 2

Chronic Health Hazard: \*

Flammability: 1

Physical Hazard 0

### NFPA Rating

Health hazard: 2

Fire Hazard: 1

Reactivity Hazard: 0

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