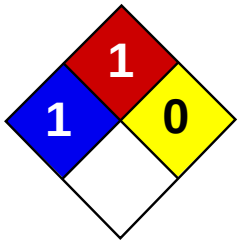

Health	2
Fire	2
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Benzyl alcohol MSDS

Section 1: Chemical Product and Company Identification

Product Name: Benzyl alcohol

Catalog Codes: SLB3328, SLB4828, SLB2491

CAS#: 100-51-6

RTECS: DN3150000

TSCA: TSCA 8(b) inventory: Benzyl alcohol

CI#: Not applicable.

Synonym: alpha-Hydroxytoluene; alpha-Toluenol; Benzal alcohol; Benzenecarbinol; Benzenemethanol; Benzoyl alcohol; Hydroxytoluene; Methanol, phenyl-; Phenolcarbinol; Phenylcarbinol; Phenylmethanol; Phenylmethyl alcohol

Chemical Name: Benzyl Alcohol

Chemical Formula: C6H5CH2OH

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Benzyl alcohol	100-51-6	100

Toxicological Data on Ingredients: Benzyl alcohol: ORAL (LD50): Acute: 1230 mg/kg [Rat]. 1360 mg/kg [Mouse]. 1040 mg/kg [Rabbit]. DERMAL (LD50): Acute: 2000 mg/kg [Rabbit].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion.

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Combustible.

Auto-Ignition Temperature: 436°C (816.8°F)

Flash Points: CLOSED CUP: 93°C (199.4°F). OPEN CUP: 100.56°C (213°F) (Cleveland).

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: When heated to decomposition it emits acrid smoke and irritating fumes. COMBUSTIBLE.

Special Remarks on Explosion Hazards: A mixture of benzyl alcohol with 58% sulfuric acid decomposes explosively at about 180 deg. C.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

Storage:
Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Sensitive to light. Store in light-resistant containers.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Gloves. A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventiliation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersioni of it into the general work area. Vapor respirator is recommended if exposure limits are exceeded or if irritation or other symptoms are experienced. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 10 from AIHA [United States] TWA: 44.2 (mg/m3) from AIHA [United States] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Aromatic. (Slight.)

Taste: Sharp burning

Molecular Weight: 108.14 g/mole

Color: Colorless. Clear

pH (1% soln/water): Not available.

Boiling Point: 205.3°C (401.5°F)

Melting Point: -15.2°C (4.6°F)

Critical Temperature: 441.85°C (827.3°F)

Specific Gravity: 1.04 (Water = 1)

Vapor Pressure: 0 kPa (@ 20°C)

Vapor Density: 3.72 (Air = 1)

Volatility: Not available.

Odor Threshold: 5.5 ppm

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 1.1

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether, acetone.

Solubility:
Soluble in diethyl ether, acetone. Partially soluble in cold water. Soluble in ethanol. Solubility in Benzene: > 10% Solubility in Water: 35,000 mg/l @ 20 deg. C; 42,900 mg/l @ 25 deg. C.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Benzyl alcohol contaminated with 1.4% hydrogen bromide and 1.2% of dissolved iron (II) polymerizes exothermally above 100 deg. C. Benzyl alcohol can extract and dissolve polystyrene plastic and may attack other plastics. Incompatible with aluminum, iron, steel

Special Remarks on Corrosivity: Will attack some plastics.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals:
Acute oral toxicity (LD50): 1040 mg/kg [Rabbit]. Acute dermal toxicity (LD50): 2000 mg/kg [Rabbit].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: liver, central nervous system (CNS).

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion.

Special Remarks on Toxicity to Animals:
Lethal Dose/Conc 50% Kill: LD50[Guinea Pig] - Route: Oral; Dose: 2500 mg/kg Lowest Published Lethal Dose/Conc: LDL[Rat] - Route: Inhalation; Dose: 1000 ppm/8H

Special Remarks on Chronic Effects on Humans:
May affect genetic material (mutagenic). May cause adverse reproductive effects based on animal test data. No human data found at this point.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: Causes skin irritation, redness, pain. It may cause tissue injury. It may be absorbed through the skin with symptoms similar to that of ingestion. Eyes: Causes eye irritation, redness, pain. May cause eye injury. Eye contact produces immediate smarting, but there is no permanent injury if exposure is brief. Inhalation: Mist or vapors

cause respiratory tract (nose, throat), irritation. Symptoms may include coughing, shortness of breath. It may be absorbed into the blood stream with symtoms similar to ingestion. Ingestion: May be harmful if swallowed. Ingestion of large doses may cause adbominal pain, nausea, vomiting, diarrhea. It may affect behavior/central nervous system and cause headache, somnolence, excitement, dizziness, ataxia, coma, convulsions, and other symptoms of central nervous system depression. It may also affect respiration (paralysis of the respiratory center, respiratory depression, gasping respirations), cardiovascular system (hypotension). Chronic Potential Health Effects: Skin: Prolonged or repeated exposure may cause allergic contact dermatitis. Ingestion: Prolonged or repeated ingestion may affect behavior/central nervous system with symptoms similar to acute ingestion. It may also affect the liver, kidneys, cardiovascular system, and metabolism (weight loss).

Section 12: Ecological Information

Ecotoxicity:
Ecotoxicity in water (LC50): 770 mg/l 48 hours [Fish (Pimephales promelas (Fatthead minnow))]. 480 mg/l 72 hours [Fish (Pimephales promelas (Fatthead minnow))]. 460 mg/l 96 hours [Fish (Pimephales promelas (Fatthead minnow))]. 10 ppm 96 hours [Fish (Lepomis macrochirus (Bluegill sunfish))]. 15 ppm 96 hours [Fish (Menidia beryllina (tidewater silverside fish))].

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: Benzyl alcohol Minnesota: Benzyl alcohol Massachusetts RTK: Benzyl alcohol TSCA 8(b) inventory: Benzyl alcohol

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R20/22- Harmful by inhalation and if swallowed. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References:
-The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.

Other Special Considerations: Not available.

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