

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Benzalkonium chloride (Powder)
Company Identification: **Swadesh Life Science**
H-103, Sumel 7, Near Soni Ni Chali
Brts, Rakhiyal
Ahmedabad , Gujarat , India

2. COMPOSITION / INFORMATION OF INGREDIENTS

Chemical description: Benzalkonium chloride

CHEMICAL NAME CAS NO.	CAS NO.
Ammonium, alkyl dimethyl benzyl-, chloride	8001-54-5

3. HAZARD IDENTIFICATION

Classification of the substance or mixture :

Classification according to EU directives
67/548/EEC or 1999/45/EC
REGULATION (EC) No. 1272/2008
Classification of the substance or
mixture

Label elements :

Hazard Statements

Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary Statements Prevention

Do not breathe mist or vapor. Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center /Doctors .

Precautionary Statements - storage Store locked up.
Precautionary Statements - Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

4. FIRST AID MEASURES

General Advice: Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive 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 immediately.

Skin Contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

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

Most important symptoms and effects, Corrosive effects. Gastrointestinal disturbances. Respiratory both acute and delayed depression.

5. FIRE FIGHTING MEASURES

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

Special hazards arising from the substance or mixture: 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.

Protective Equipment and Precautions for Firefighters

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective and emergency procedures: Keep unnecessary personnel away. Do not touch equipment damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of vapors. Wear appropriate personal protective equipment.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep locked up.. Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Do not ingest. Do not breathe dust. Never add water to this product. 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, moisture.

Conditions for safe storage, including any Hygroscopic. Keep container tightly closed. Keep container in incompatibilities & Storage: a cool, well-ventilated area. Do not store above 23°C (73.4°F).

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters

Exposure controls

Engineering Controls:

No exposure standards allocated.

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit

Personal Protective Equipment:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Eye/face Protection :

Safety glasses with sideshields are recommended. Face shields or goggles may be required if splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area.

Skin Protection :

Chemically compatible gloves. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy. To reduce the risk of contamination of skin and surfaces, wear two pairs of gloves. Remove the outer gloves after handling and cleanup of the material, and remove the inner gloves only after removing other personal protective equipment.

Body Protection :

For handling of laboratory scale quantities, a disposable lab coat or isolation gown over street clothes is recommended. Where significant quantities are handled, work clothing and booties may be necessary to prevent take-home contamination Environmental exposure controls:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Solid. (Amorphous solid powder or lumps.)

Colour:	Clear Colorless.
Odour:	Aromatic.
pH-value:	Not available.
Melting point/Melting range:	Decomposition temperature: >140°C (284°F)
Boiling point/Boiling range:	Not available
Flash point :	OPEN CUP: 250°C (482°F).
Explosive propertive :	
Flammability (solid, gas) :	May be combustible at high temperature
Explosion Limits :	Not available
Vapour pressure :	Not applicable
Specific gravity :	0.98 (Water = 1)
Vapour Density :	>1 (Air = 1)

Easily soluble in cold water, hot water. Soluble in acetone. Very slightly soluble in diethyl ether. Very soluble in alcohol. Soluble in benzene. Solubility in Benzene: 1 g dissolves in 6 ml of benzene. Solubility in Ether: 1 g dissolves in 100 ml of Ether

Solubility :	
Partition coefficient :	Not available
Auto-ignition temperature :	Not available.
Viscosity @25°C :	
Oxidizing properties :	

10. STABILITY AND REACTIVITY

Reactivity	No reactivity hazards known.
Chemical stability	The product is stable.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	None known.
Incompatible materials:	Reactive with oxidizing agents. Slightly reactive to reactive with acids, alkalis.
Hazardous decomposition products :	NO _x , Cl ⁻ . Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions

11. TOXICOLOGICAL INFORMATION

Acute toxicity: (LD50/oral/rat)	240 mg/kg [Rat].
Inhalation :	May cause respiratory tract and mucous membrane irritation with sore throat, coughing, shortness of breath, and delayed lung edema. May cause chemical burns to the respiratory tract . High vapor concentrations may cause nervous system effects
Skin irritation / sensitisation	Causes skin irritation and skin burns
Reproductive toxicity :	May affect material (mutagenic) and may cause adverse reproductive effects
Eye irritation	Causes eye irritation and eye burns.
Germ cell mutagenicity :	Mutagenic for mammalian somatic cells. [Benzalkonium chloride]. Mutagenic for bacteria and/or yeast. [Benzalkonium chloride]. Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200 Proof].
Carcinogenicity :	Classified PROVEN by State of California Proposition 65 [Ethyl alcohol 200 Proof]. Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof]

12. ECOLOGICAL INFORMATION

Ecotoxicity :	Not available.
Mobility in soil	Not available
Persistence and degradability:	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Bioaccumulative potential:	Not available.
Results of PBT and vPvB assessment :	

13. DISPOSAL CONSIDERATIONS

Waste Disposal methods Product:	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Contaminated Packing	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. OTHER INFORMATION

Emergency seek Medical Aid