

OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599
Email : info@ottokemi.com, Web : www.ottokemi.com

ISO 9001: 2015

MATERIAL SAFETY DATA SHEET

1. Identification

1.1 GHS Product identifier
Benzalkonium chloride, 99%
Code B 1457

2. Hazard identification

2.1 Classification of the substance or mixture
Acute toxicity - Oral, Category 4
Acute toxicity - Dermal, Category 4
Skin corrosion, Category 1B
Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1
2.2 GHS label elements, including precautionary statements
Pictogram(s)



Signal word

Hazard statement(s)

Danger
H302 Harmful if swallowed
H312 Harmful in contact with skin
H314 Causes severe skin burns and eye damage
H400 Very toxic to aquatic life

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.

Response

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of water/...
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see ... on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER/doctor
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/container to ...

Storage

Disposal

2.3 Other hazards which do not result in classification
none

3. Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Benzalkonium chloride	Benzalkonium chloride	63449-41-2	none	100%

4. First-aid measures

4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Fresh air, rest. Fresh air, rest. Half-upright position. Refer for medical attention.

In case of skin contact

Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention .

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

If swallowed

Give one or two glasses of water to drink. Give one or two glasses of water to drink. Refer for medical attention .

4.2 Most important symptoms/effects, acute and delayed

SYMPTOMS: Symptoms of exposure to this compound may include burning of the mouth, throat and abdomen on ingestion,

circulatory and respiratory failure, cyanosis central nervous system depression and muscular weakness. ACUTE/CHRONIC

HAZARDS: This compound is an irritant to the eyes and mucous membranes. It may cause respiratory failure and/or cardiovascular collapse. It also may cause renal failure.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Fires involving this compound should be controlled with a dry chemical, carbon dioxide or Halon extinguisher.

5.2 Specific hazards arising from the chemical

Flash point data for this chemical are not available, but it is probably combustible.

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Personal protection: chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into containers or absorb liquid in sand or inert absorbent and remove to safe place.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Separated from food and feedstuffs. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves

have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

9. Physical and chemical properties

Physical state

liquid or powder

Colour

no data available

Odour

no data available

Melting point/ freezing point	247\°C(dec.)(lit.)
Boiling point or initial boiling point and boiling range	147\°C/8mmHg(lit.)
Flammability	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.
Lower and upper explosion limit / flammability limit	no data available
Flash point	154\°C(lit.)
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	Soluble (≥ 10 mg/ml at 17.22\°C)
Partition coefficient n-octanol/water (log value)	no data available
Vapour pressure	no data available
Density and/or relative density	0.989 g/cm ³
Relative vapour density	no data available
Particle characteristics	no data available

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

BENZYLDIMETHYL(MIXED ALKYL)AMMONIUM CHLORIDE is incompatible with anionic detergents and nitrates. Quaternary ammonium salts often serve as catalysts in reactions. They are incompatible with many strong oxidizers and reducing agents, such as metal hydrides, alkali/active metals, and organometallics.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

11. Toxicological information

Acute toxicity

Oral: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12. Ecological information

12.1 Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2 Persistence and degradability

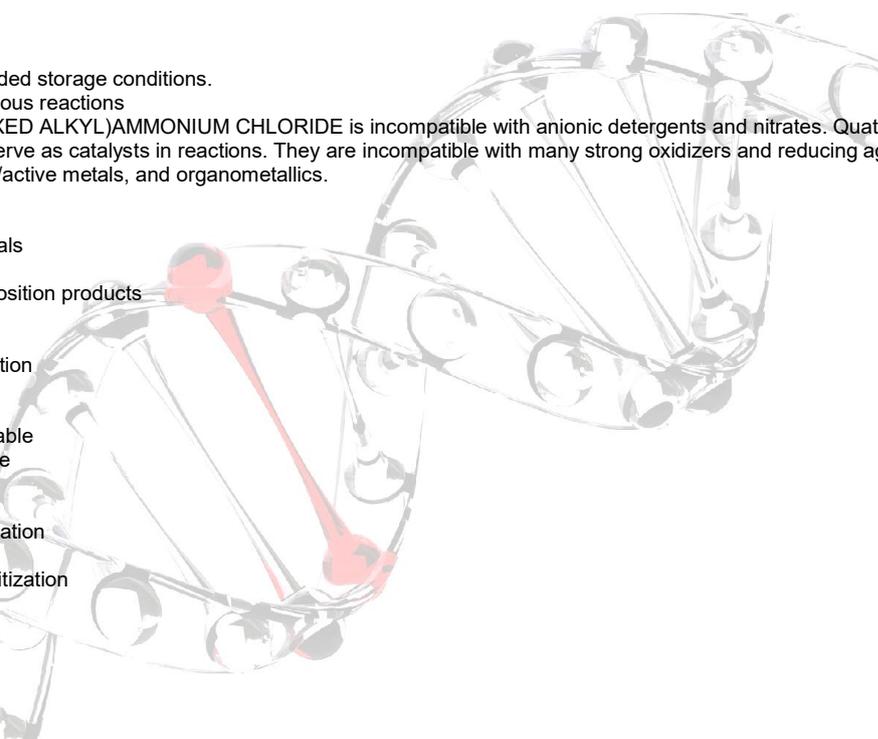
no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available



12.5 Other adverse effects
no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: UN3261

IMDG: UN3261

IATA: UN3261

14.2 UN Proper Shipping Name

ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

IATA: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packing group, if applicable

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG: yes

IATA: yes

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Benzalkonium chloride	Benzalkonium chloride	63449-41-2	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.