

# SAFETY DATA SHEET

## Behentrimonium Chloride

### 1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Behentrimonium Chloride

Company: Natural Bulk Supplies, 318 Half Day Rd, # 348,  
Buffalo Grove, IL 60089 Phone: 847-489-7180

Emergency Contact: Infotrac: 800-535-5053(North America) +1-352-323-3500 (International)

### 2. HAZARD IDENTIFICATION

#### GHS Classification

Skin corrosion/irritation : Category2

Serious eye damage/irritation : Category1

Specific target organ toxicity(Repeated exposure) : Category2

Acute aquatic toxicity : Category1

Chronic aquatic toxicity : Category1

#### GHS Label Elements

#### Hazard symbols



#### Signal Word

Danger

#### Hazard Statements

H315 Causes skin irritation

H318 Causes serious eye damage

H373 May cause damage to organs through prolonged or repeated exposure

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

## Precautionary Statements

### Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

### Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P314 Get medical advice/attention if you feel unwell.

P321 Specific treatment

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

### Storage

Not applicable.

### Disposal

501 Dispose of contents/container in accordance with local/regional/national/international regulation.

### Other hazards which do not result in classification

Not available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

INCI NAME	CAS NO.	CONCENTRATION (%)
Quaternary ammonium compounds, alkyl (C=20-22)trimethyl, chlorides	68607-24-9	80
2-Propanol	67-63-0	18
Water	7732-18-5	2

#### 4. FIRST AID MEASURES

##### **Eye Contact**

Do not rub your eyes.

Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.

Get medical attention immediately.

Remove contact lenses if worn.

##### **Skin Contact**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Wash contaminated clothing thoroughly before re-using.

Get medical attention immediately.

Go to the hospital immediately if symptoms (flare, irritate) occur.

Wash thoroughly after handling.

##### **Inhalation Contact**

Take specific treatment if needed.

When exposed to large amounts of steam and mist, move to fresh air.

Get medical attention immediately.

##### **Ingestion Contact**

Please be advised by doctor whether induction of vomit is demanded or not.

Rinse your mouth with water immediately.

Get medical attention immediately.

##### **Delayed and immediate effects and also chronic effects from short and long term exposure**

Not available.

##### **Notes to physician**

Notify medical personnel of contaminated situations and have them take appropriate protective measures.

#### 5. FIRE FIGHTING MEASURES

##### **Suitable (Unsuitable) extinguishing media**

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

Dry chemical, carbon dioxide, regular foam extinguishing agent, water spray

##### **Specific hazards arising from the chemical**

Causes serious eye damage

Causes skin irritation

May cause damage to organs through prolonged or repeated exposure  
Very toxic to aquatic life  
Very toxic to aquatic life with long lasting effects

**Special protective actions for firefighters**

Avoid inhalation of materials or combustion by-products.  
Cool containers with water until well after fire is out.  
Do not approach the tank surrounded by fire until it is extinguished.  
In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.  
Keep unauthorized personnel out.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Do not touch spilled material. Stop leak if you can do it without risk.  
Handle the damaged containers or spilled material after wearing appropriate protective equipment  
Move container to safe area from the leak area.  
Must work against the wind, let the upwind people to evacuate.  
Remove all sources of ignition.

**Environmental precautions**

If large amounts have been spilled, inform the relevant authorities.  
Prevent runoff and contact with waterways, drains or sewers.

**Methods and materials for containment and cleaning up**

Appropriate container for disposal of spilled material collected.  
Disposal of waste shall be in compliance with the Wastes Control Act  
Dust spills : Cover dust spills with plastic sheet or waterproof cloth to minimize spreading and avoid contact with water.  
Large spill : Stay upwind and keep out of low areas. Dike for later disposal.  
Notify the central and local government if the emission reach the standard threshold.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid contact with incompatible materials.  
Avoid direct physical contact.  
Comply with all applicable laws and regulations for handling  
Dealing only with a well-ventilated place.  
Do not handle until all safety precautions have been read and understood.

**Conditions for safe storage, including any incompatibilities**

Avoid direct sunlight.  
Check regularly for leaks.  
Do not apply any physical shock to container.  
Do not apply direct heat.  
Do not use damaged containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits

#### ACGIH TLV

[2-Propanol] : TWA, 200 ppm (491 mg/m<sup>3</sup>), STEL, 400 ppm (984 mg/m<sup>3</sup>)

#### OSHA PEL

[2-Propanol] : 400 ppm, 980 mg/m<sup>3</sup>

### Engineering controls

Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

### Individual protection measures, such as personal protective equipment

#### Respiratory protection

Air-purifying respirator with high-efficiency particulate filtering

Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)

Consider warning properties before use.

Dust, mist, fume-purifying respiratory protection

For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

Respiratory protection is ranked in order from minimum to maximum.

Self-contained breathing apparatus with a corpuscle filter of high efficiency

Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.

#### Eye protection

Provide an emergency eye wash station and quick drench shower in the immediate work area.

Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.

#### Hand Protection

Wear appropriate chemical resistant glove.

#### Skin protection

Wear appropriate chemical resistant protective clothing.

**Others**

Not available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Solid (Pellets at 25°C)
Color	White or slightly yellow.
Odor	Characteristic
Odor threshold	Not available
pH	5-8 (2% in H <sub>2</sub> O/EtOH=1/1)
Melting point/Freezing point	Not available
Initial Boiling Point/Boiling Ranges	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability(solid, gas)	Non flammable solid
Upper/Lower Flammability or explosive limits	Lower explosion limit: 2.0%(Isopropyl alcohol), Upper explosion limit: 12.7%(Isopropyl alcohol)
Vapour pressure	4.4 kPa (at 20°C) (Isopropyl alcohol)
Solubility	Dispersible
Vapour density	2.07 (Air=1)
Specific gravity(Relative density)	Not available
Partition coefficient of n-octanol/water	Not available
Autoignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Molecular weight	Not available

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## 10. STABILITY AND REACTIVITY

### **Chemical Stability**

This material is stable under recommended storage and handling conditions.

### **Possibility of hazardous reactions**

Hazardous Polymerization will not occur.

### **Conditions to avoid**

Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

Avoid contact with incompatible materials and condition.

### **Incompatible materials**

Not available

### **Hazardous decomposition products**

May emit flammable vapour if involved in fire.

## 11. TOXICOLOGICAL INFORMATION

### **Information on the likely routes of exposure**

#### **Respiratory tracts**

Not available

#### **Oral**

Not available.

#### **Eye-Skin**

Causes serious eye damage

Causes skin irritation.

### **Delayed and immediate effects and also chronic effects from short and long term exposure**

#### **Acute toxicity**

##### **Oral**

Product (ATEmix) : 2000mg/kg < ATEmix <= 5000mg/kg

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : Rat(F) LD50 = 3190 mg/kg bw (OECD TG 401)(ECHA chem)

[2-Propanol] : LD50 5840 mg/kg Rat (OECD TG 401) (ECHA)

[Water] : LD50 > 90000 mg/kg Rat (LD50 > 90 ml/kg) (HSDB)

##### **Dermal**

Product (ATEmix) : >5000mg/kg

[2-Propanol] : LD50 12800 mg/kg (16.4 mL/kg) Rabbit (OECD TG 402) (ECHA)

**Inhalation**

Product (ATEmix) : >12.5mg/L, Dusts/Mists, 4hr

[2-Propanol] : Vapor LC50 > 30.1 mg/L 4 hr (>10000 ppm 6 hr) Rat No death GHS criteria not met (OECD TG 403, GLP) (ECHA)

**Skin corrosion/irritation**

Causes skin irritation

**Serious eye damage/irritation**

Causes serious eye damage

**Respiratory sensitization**

Not available

**Skin sensitization**

Not available

**Carcinogenicity**

\*IARC

[2-Propanol] : Group 3

OSHA

Not available

\*ACGIH

[2-Propanol] : A4

\*NTP

Not available

\*EU CLP

Not available

**Germ cell mutagenicity**

Not available

**Reproductive toxicity**

Not available

**STOT-single exposure**

Not available

**STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure



**Aspiration hazard**

Not available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Fish**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : Danio rerio 96hr  
LC50=3.5 mg/L (OECD TG 203, GLP)

[2-Propanol] : LC50 9640 mg/L 96 hr Pimephales promelas (ECHA)

**Crustaceans**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : Daphnia magna 48hr  
EC50=1.39 mg/L (OECD TG 202, GLP)

**Algae**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : Desmodesmus  
subspicatus 72hr EC50=3.48 mg/L (Growth rate)(OECD TG 201, GLP)(ECHA Chem)

**Persistence and degradability**

**Persistence**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : log kow= 3.29(20  
°C, pH5.4)(ECHA chem)

[2-Propanol] : log Pow 0.05 (25 °C) (ECHA)

[Water] : log Kow = -1.38 (HSDB)

**Degradability**

[2-Propanol] : BOD5/COD ratio  $\geq$  0.5, biodegrades immediately (ECHA)

**Bioaccumulative potential**

Not available

**Biodegradation**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : 21%, 28 days  
(OECD TG 301 B, GLP)

[2-Propanol] : Readily biodegradable (ECHA)

**Mobility in soil**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : Koc 516000 ~ 950  
((OECD TG 106, GLP)) (ECHA Chem)

[2-Propanol] : log Koc 0.03 (SIDS)

**Other adverse effects**

[Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : W/S : ca. 0.01 g/L(25 °C pH5.4)(ECHA chem) Daphnia 21d NOEC=128 µg/L (: 0.128 mg/L)(OECD TG 211 GLP)

### 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

It shall be treated by incineration

Oil water separation technology shall be applied as pre-waste treatment if it is applicable

Stabilization and minimization treatment by incineration or similar method can be applied, if more than two kinds of designated wastes are in mixture state and it is impractical to separate them.

#### **Special precautions for disposal**

Anyone with business license number who generates industrial wastes shall treat the waste by him/herself or by entrusting to the legal entities who treat the wastes, recycle the wastes of others or install and operate the waste treatment facilities according to the Wastes Control Act. Dispose of waste in accordance with all applicable laws and regulations.

### 14. TRANSPORT INFORMATION

#### **UN No. (IMDG CODE/IATA DGR)**

3077

#### **Proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides)

#### **Hazard Class**

9

#### **IMDG CODE/IATA DGR Packing group**

III

#### **Marine pollutant**

Applicable

#### **Special precautions for user related to transport or transportation measures**

Local transport follows in accordance with Dangerous goods Safety Management Law.

Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

EmS FIRE SCHEDULE : F-A (General fire schedule)

EmS SPILLAGE SCHEDULE : S-F (Water-soluble marine pollutants)

## 15. REGULATORY INFORMATION

### National and/or international regulatory information

POPs Management Law

- [Quaternary ammonium compounds, alkyl(C=20-22)trimethyl, chlorides] : Not applicable
- [2-Propanol] : Not applicable
- [Water] : Not applicable

### Information of EU Classification

Classification

- [2-Propanol] : H225,H319,H336

### U.S. Federal regulations

\*OSHA PROCESS SAFETY (29CFR1910.119)

- Not applicable

\*CERCLA Section 103 (40CFR302.4)

- Not applicable

\* EPCRA Section 302 (40CFR355.30)

- Not applicable

\*EPCRA Section 304 (40CFR355.40)

- Not applicable

\*EPCRA Section 313 (40CFR372.65)

- [2-Propanol] : Applicable

- oRotterdam Convention listed ingredients

- Not applicable

- oStockholm Convention listed ingredients

- Not applicable

- oMontreal Protocol listed ingredients

- Not applicable

## 16. OTHER INFORMATION

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