



TOKYO CHEMICAL INDUSTRY CO., LTD.

Benzalkonium Chloride (50% in Water)

Revision 1  
number:

Revision date: 10/10/2018

Page 1 of 4

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## SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product name:** Benzalkonium Chloride (50% in Water)  
**Product code:** B0414  
**Company:** TOKYO CHEMICAL INDUSTRY CO., LTD.  
**Address:** 4-10-2, Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan  
**Responsible department:** Global Business Department  
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**Revision number:** 1

### 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Acute toxicity (Oral)

Category 4

Acute toxicity (Dermal)

Category 4

Skin corrosion/irritation

Category 1C

Serious eye damage/eye irritation

Category 1

ENVIRONMENTAL HAZARDS

Acute aquatic hazard

Category 1

Label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statements

Harmful if swallowed or in contact with skin.  
Causes severe skin burns and eye damage  
Very toxic to aquatic life

Precautionary statements

[Prevention]

Do not breathe dusts or mists.  
Avoid release to the environment.  
Do not eat, drink or smoke when using this product.  
Wash hands and face thoroughly after handling.  
Wear protective gloves, protective clothing, face protection.

[Response]

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.  
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 or doctor.

[Storage]

Collect spillage.

[Disposal]

Store locked up.

Dispose of contents and container in accordance with local, regional, national regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Substance/mixture:</b>	Mixture
<b>Components:</b>	Benzalkonium Chloride (50% in Water)
<b>Percent:</b>	....
<b>CAS RN:</b>	63449-41-2
<b>Synonyms:</b>	Alkyldimethylbenzylammonium Chloride (50% in Water) , Benzyldimethylalkylammonium Chloride (50% in Water)
<b>Chemical Formula:</b>	$[\text{RN}(\text{CH}_3)_2\text{CH}_2\text{C}_6\text{H}_5]\text{Cl}$
<b>Notice Through Official Gazettes Reference Number</b>	
<b>ENCS:</b>	(3)-2694
<b>ISHL:</b>	Official announcement chemistry substance.

### 4. FIRST-AID MEASURES

<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
<b>Skin contact:</b>	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
<b>Ingestion:</b>	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
<b>Protection of first-aiders:</b>	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Dry chemical, foam, water spray, carbon dioxide.
<b>Specific hazards arising from the chemical:</b>	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
<b>Precautions for firefighters:</b>	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
<b>Special protective equipment for firefighters:</b>	When extinguishing fire, be sure to wear personal protective equipment

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
<b>Environmental precautions:</b>	Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned.
<b>Methods and materials for containment and cleaning up:</b>	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

<b>Technical measures:</b>	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.
<b>Advice on safe handling:</b>	Avoid contact with skin, eyes and clothing.
<b>Conditions for safe storage, including any incompatibilities</b>	
<b>Storage conditions:</b>	Keep container tightly closed. Store in a cool and dark place. Store locked up. Store away from incompatible materials such as oxidizing agents.
<b>Packaging material:</b>	Comply with laws.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls:</b>	Install a closed system or local exhaust. Also install safety shower and eye bath.
<b>Control parameters:</b>	Not set up
<b>Personal protective equipment</b>	
<b>Respiratory protection:</b>	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
<b>Hand protection:</b>	Impervious gloves.
<b>Eye protection:</b>	Safety goggles. A face-shield, if the situation requires.
<b>Skin and body protection:</b>	Impervious protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state (20°C):</b>	Liquid
<b>Form:</b>	Clear
<b>Colour:</b>	Colorless - Pale yellow
<b>Odour:</b>	Odorless
<b>pH:</b>	No data available
<b>Melting point/freezing point:</b>	No data available
<b>Boiling point/range:</b>	No data available
<b>Flash point:</b>	No data available
<b>Flammability or explosive limits:</b>	
<b>Lower:</b>	No data available
<b>Upper:</b>	No data available
<b>Relative density:</b>	No data available
<b>Solubility(ies):</b>	
<b>[Water]</b>	No data available
<b>[Other solvents]</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available
<b>Chemical stability:</b>	Stable under proper conditions.
<b>Possibility of hazardous reactions:</b>	No special reactivity has been reported.
<b>Incompatible materials:</b>	Oxidizing agents
<b>Hazardous decomposition products:</b>	Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen chloride

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	orl-mus LD50:150 mg/kg skn-rat LD50:1420 mg/kg ivn-mus LD50:16 mg/kg
<b>Skin corrosion/irritation:</b>	No data available
<b>Serious eye damage/irritation:</b>	No data available
<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	
<b>IARC =</b>	No data available
<b>NTP =</b>	No data available
<b>Reproductive toxicity:</b>	No data available
<b>RTECS Number:</b>	BO3151000

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Fish:	96h LC50:0.31 mg/L (Lepomis macrochirus)
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	0% (by BOD)
Bioaccumulative potential(BCF):	<02 - 5.9 (conc. 0.5 mg/L) , <1.8 - 8.6 (conc. 0.05 mg/L)

\*The substance was determined as "Low bioconcentration " under the Chemical Substances Control Law.

### Mobility in soil

Log Pow:	No data available
Soil adsorption (Koc):	No data available
Henry's Law (PaM <sup>3</sup> /mol):	No data available
Other adverse effects:	No data available

## 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

## 14. TRANSPORT INFORMATION

Hazards Class:	8: Corrosive.
UN-No:	1760
Proper shipping name:	Corrosive liquid, n.o.s.
Packing group:	III
Marine pollutant	Y
Specific precautionary transport measures and conditions:	

## 15. JAPANESE REGULATORY INFORMATION

Law for safety of vessels: Hazardous materials notification, Schedule form No.1 Corrosive substance

## 16. OTHER INFORMATION

### The reference company name of written contents

Company:	TOKYO CHEMICAL INDUSTRY CO., LTD.
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This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.