

Page 1/9 Revision Date 28-Mar-2025 Version 3

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

Product Identifier

Perihalan Produk: Benzyldimethyl-n-dodecylammonium chloride Product Description: Benzyldimethyl-n-dodecylammonium chloride

 Cat No. :
 H60196

 CAS No
 139-07-1

 Molecular Formula
 C21 H38 CI N

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Company Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd

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**Supplier** 

E-mail address Enquiry.my@thermofisher.com

Emergency Telephone Number Tel: +03-5525 7888

CHEMTREC Malaysia 1-800-815-308 (Malay)

CHEMTREC Malaysia (Kuala Lumpur) +(60)-327884561 (Malay)

# **SECTION 2: HAZARDS IDENTIFICATION**

## Classification of the substance or mixture

Acute oral toxicity	Category 4 (H302)
Skin Corrosion/Irritation	Category 1 B (H314)
Serious Eye Damage/Eye Irritation	Category 1 (H318)
Acute aquatic toxicity	Category 1 (H400)

#### Label Elements



Signal Word Danger

#### Benzyldimethyl-n-dodecylammonium chloride

#### **Hazard Statements**

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H400 - Very toxic to aquatic life

#### **Precautionary Statements**

#### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

P330 - Rinse mouth

P331 - Do NOT induce vomiting

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

#### **Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Other Hazards

This product does not contain any known or suspected endocrine disruptors

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %		
Benzyldimethyldodecylammonium chloride	139-07-1	<=100		

# **SECTION 4: FIRST AID MEASURES**

Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Keep eye wide open while rinsing.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician immediately.

**Immediate medical attention is required.** Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison

control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a

one-way valve or other proper respiratory medical device.

**Self-Protection of the First Aider** No special precautions required.

ALFAAH60196

Revision Date 28-Mar-2025

#### Benzyldimethyl-n-dodecylammonium chloride

Revision Date 28-Mar-2025

#### Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

#### Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

#### Extinguishing media

## **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### Special hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen chloride.

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

# Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

## Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

#### Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

#### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### **Precautions for Safe Handling**

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume

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#### Benzyldimethyl-n-dodecylammonium chloride

Revision Date 28-Mar-2025

hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

#### Conditions for Safe Storage, Including any Incompatibilities

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### Specific End Uses

Use in laboratories.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

#### **Exposure Controls**

#### **Engineering Measures**

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

**Eye Protection** Goggles

Hand Protection Protective gloves
Skin and body protection Long sleeved clothing

#### Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection No protective equipment is needed under normal use conditions

Recommended Filter type: Particle filter

<u>Hygiene Measures</u> Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** Prevent product from entering drains Do not allow material to contaminate ground water

system Local authorities should be advised if significant spillages cannot be contained

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### Information on basic physical and chemical properties

Appearance White Physical State Solid

Odor No information available
Odor Threshold No data available
pH No information available

#### Benzyldimethyl-n-dodecylammonium chloride

Melting Point/Range 60 °C / 140 °F

Solid

Solid

Melting Point/Range60 °C / 140 °FSoftening PointNo data availableBoiling Point/RangeNo information available

Flash Point No information available Method - No information available

Evaporation Rate Not applicable Solid Flammability (solid,gas) No information available

Explosion Limits

No data available

Vapor PressureNo data availableVapor DensityNot applicable

Specific Gravity / DensityNo data availableBulk DensityNo data availableWater SolubilityNo information availableSolubility in other solventsNo information available

Partition Coefficient (n-octanol/water)

Autoignition TemperatureNo data availableDecomposition TemperatureNo data available

Viscosity
Not applicable

Fynosive Properties
No information available

**Explosive Properties**Oxidizing Properties
No information available
No information available

Molecular FormulaC21 H38 CI NMolecular Weight339.99

# **SECTION 10: STABILITY AND REACTIVITY**

Reactivity

None known, based on information available.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization
Hazardous Reactions
No information available.
None under normal processing.

Conditions to Avoid

None known.

Incompatible Materials

Strong bases. Oxidizing agent.

**Hazardous Decomposition Products** 

ALFAAH60196

Revision Date 28-Mar-2025

Revision Date 28-Mar-2025

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx). Hydrogen chloride.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

#### Information on Toxicological Effects

#### **Product Information**

(a) acute toxicity;

Oral Category 4 Dermal No data available Inhalation No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
Benzyldimethyldodecylammonium chloride	LD50 = 400 mg/kg (Rat)	-	-		

Category 1 B (b) skin corrosion/irritation;

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

No data available Respiratory Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

No data available (g) reproductive toxicity;

No data available (h) STOT-single exposure;

(i) STOT-repeated exposure; No data available

No information available. **Target Organs** 

(j) aspiration hazard; Not applicable

Solid

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation.

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

# **SECTION 12: ECOLOGICAL INFORMATION**

## Benzyldimethyl-n-dodecylammonium chloride

**Ecotoxicity effects** Very toxic to aquatic organisms. The product contains following substances which are

hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Benzyldimethyldodecylammonium chloride				EC50 = 1.43 mg/L 10
				min
				EC50 = 1.62 mg/L 5 min

Persistence and degradability

Degradation in sewage treatment plant

No information available

Contains substances known to be hazardous to the environment or not degradable in waste

Revision Date 28-Mar-2025

water treatment plants.

Bioaccumulative potential No information available

**Mobility in soil** No information available.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

Other adverse effects No information available

# **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Should not be released into the environment Waste is classified as hazardous Dispose of in accordance with the European Directives on waste and hazardous waste Dispose of in

accordance with local regulations

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Do not flush to sewer Waste codes should be assigned by the user based on the

application for which the product was used Do not empty into drains Large amounts will affect pH and harm aquatic organisms Do not let this chemical enter the environment

# **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO

UN-No UN3261
Hazard Class 8
Packing Group III

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s. (Benzyldimethyl-n-dodecylammonium chloride)

Road and Rail Transport

UN-No UN3261 Hazard Class 8 Packing Group III

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s. (Benzyldimethyl-n-dodecylammonium chloride)

**IATA** 

\_\_\_\_\_\_\_\_\_UN-No UN3261

#### Benzyldimethyl-n-dodecylammonium chloride

**Hazard Class** Ш **Packing Group** 

**Proper Shipping Name** Corrosive solid, acidic, organic, n.o.s. (Benzyldimethyl-n-dodecylammonium chloride)

**Special Precautions for User** No special precautions required

#### SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
Benzyldimethyldodecylammonium	205-351-5	Х	Х	Х	Х	Х	Х	Х	KE-12962
chloride									

#### **National Regulations**

**Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 16: OTHER INFORMATION**

## Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Revision Date 28-Mar-2025

Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances **IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

POW - Partition coefficient Octanol:Water

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from

Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Health, Safety and Environmental Department **Prepared By** 

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Benzyldimethyl-n-dodecylammonium chloride

Revision Date 28-Mar-2025

**Revision Summary** 

Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**