

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

**Product Identifier**

**Product Description:** n-Butyl chloroformate  
**Cat No. :** **B22215**  
**CAS No** 592-34-7  
**Molecular Formula** C5 H9 Cl O2

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

**Recommended Use** Laboratory chemicals.  
**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**
**Importer**

Fisher Scientific Korea  
 D5,D6, Incheon Airport Logistics Complex  
 150, Gonghangdong-Ro 296 Beon-Gil  
 Jung-Gu, Incheon  
 Tel: +82-1661-9555  
 Fax: +82-2-2023-0603

**Supplier**

Thermo Fisher Scientific Chemicals, Inc.  
 30 Bond Street  
 Ward Hill, MA 01835-8099

**E-mail address**

Chem.KR@thermofisher.com

**Emergency Telephone Number**

**Emergency telephone: Medical:** +(82) 070-7686-0086 or + 1-703-741-5970  
**CHEMTREC:** 080 822 1374 (Local), CHEMTREC: 1-800-424-9300 or + 1-703-527-3887  
**Korea:** 00-308-13-2549 (24 hours a day, 7 days a week)

## SECTION 2: HAZARDS IDENTIFICATION

**Classification of the substance or mixture**
**Physical hazards**

Flammable liquids

Category 3

**Health hazards**

Acute Oral Toxicity  
 Acute Inhalation Toxicity - Vapors  
 Skin Corrosion/Irritation  
 Serious Eye Damage/Eye Irritation

Category 4  
 Category 2  
 Category 1 B  
 Category 1

**Environmental hazards**

Based on available data, the classification criteria are not met

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## Label Elements



Signal Word

Danger

### Hazard Statements

H226 - Flammable liquid and vapor

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H330 - Fatal if inhaled

H318 - Causes serious eye damage

### Precautionary Statements

#### Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

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

P284 - Wear respiratory 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

P363 - Wash contaminated clothing before reuse

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

#### Storage

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

P405 - Store locked up

#### Disposal

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

### Other Hazards

Lachrymator (substance which increases the flow of tears)

This product does not contain any known or suspected endocrine disruptors

Toxic to terrestrial vertebrates

## NFPA

Health  
4

Flammability  
2

Instability  
0

Physical hazards  
N/A

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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## 3.1. Substances

Component	Common Name	CAS No	Index No	Weight %
Butyl chloroformate	No information available	592-34-7	Not listed	99 - 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. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

#### Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

#### Inhalation

If not breathing, give artificial respiration. 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. Remove to fresh air. Immediate medical attention is required.

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

Causes burns by all exposure routes. Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. 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>). Dry chemical. Chemical foam. Do not use a solid water stream as it may scatter and spread fire. Water mist may be used to cool closed containers. 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

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

### Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Phosgene, Hydrogen chloride gas.

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## 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

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

### Methods and Material for Containment and Cleaning Up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

### Conditions for Safe Storage, Including any Incompatibilities

Keep away from heat, sparks and flame. Refrigerator/flammables. Keep under nitrogen. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

### Specific End Uses

Use in laboratories.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Component	CAS No	Korea	ACGIH TLV	OSHA PEL
Butyl chloroformate	592-34-7	Not listed	Not listed	Not listed

Component	CAS No	European Union	The United Kingdom	Germany
Butyl chloroformate	592-34-7	Not listed	STEL: 3 ppm 15 min STEL: 17.1 mg/m <sup>3</sup> 15 min TWA: 1 ppm 8 hr TWA: 5.7 mg/m <sup>3</sup> 8 hr	TWA: 0.2 ppm (8 Stunden). AGW - exposure factor 2 TWA: 1.1 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2 TWA: 0.2 ppm (8 Stunden). MAK TWA: 1.1 mg/m <sup>3</sup> (8 Stunden). MAK Höhepunkt: 0.4 ppm Höhepunkt: 2.2 mg/m <sup>3</sup>

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## ACGIH - Biological Exposure Indices

Component	CAS No	ACGIH - Biological Exposure Indices
Butyl chloroformate	592-34-7	Not listed

## Exposure Controls

### Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

### Eye Protection

If splashes are likely to occur: Goggles Face protection shield

### Hand Protection

Protective gloves

### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

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.

### Personal protective equipment

#### Respiratory Protection

Use only those certified by the Korea Occupational Safety and Health Administration.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

#### Recommended Filter type:

Particulates filter conforming to EN 143 Acid gases filter Type E Yellow conforming to EN14387

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

When RPE is used a face piece Fit Test should be conducted

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

## Environmental exposure controls

No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance (Physical State, Color, etc.) No information available Liquid

Odor No information available

Odor Threshold No data available

pH No information available

Melting Point/Range < -70 °C / -94 °F

Softening Point No data available

Boiling Point/Range 142 °C / 287.6 °F

Flash Point 39 °C / 102.2 °F

@ 760 mmHg

Method - No information available

Evaporation Rate No data available

Flammability (solid,gas) Not applicable Liquid

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**Explosion Limits** No data available

**Vapor Pressure** 7.18 mbar @ 20 °C  
**Vapor Density** 4.7 (Air = 1.0)  
**Specific Gravity / Density** 1.060  
**Bulk Density** Not applicable Liquid  
**Water Solubility** Decomposes in contact with water  
**Solubility in other solvents** No information available

## Partition Coefficient (n-octanol/water)

Component	CAS No	log Pow
Butyl chloroformate	592-34-7	No data available

**Autoignition Temperature** 285 °C / 545 °F  
**Decomposition Temperature** No data available  
**Viscosity** 0.95 mPa s at 20 °C  
**Explosive Properties** explosive air/vapour mixtures possible  
**Oxidizing Properties** No information available

**Molecular Formula** C5 H9 Cl O2  
**Molecular Weight** 136.58

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity** None known, based on information available

**Chemical Stability** Stable under normal conditions. Moisture sensitive.

### Possibility of Hazardous Reactions

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

**Conditions to Avoid** To avoid thermal decomposition, do not overheat. Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Incompatible products. Exposure to moist air or water.

**Incompatible Materials** Strong oxidizing agents. Strong bases. Amines. Strong reducing agents.

### Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Phosgene. Hydrogen chloride gas.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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## Product Information

### Information on expected route of exposure

**Inhalation** Not an expected route of exposure.  
**Ingestion** May be harmful if swallowed.  
**Eyes** Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness. Lachrymator (substance which increases the flow of tears).  
**Skin** Avoid contact with skin. Causes burns. Skin Corrosion/Irritation.

### Information on Health Hazards

#### (a) acute toxicity;

**Oral** Category 4  
**Dermal** No data available  
**Inhalation** Category 2

Component	CAS No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Butyl chloroformate	592-34-7	LD50 = 1325 mg/kg (Rat)	No data available	LC50 = 200 ppm (1.12 mg/l) (Rat) 1 h

(b) skin corrosion/irritation; Category 1

(c) serious eye damage/irritation; Category 1

#### (d) respiratory or skin sensitization;

**Respiratory** No data available  
**Skin** No data available

Component	CAS No	Test method	Test species	Study result
Butyl chloroformate	592-34-7	No data available	No data available	No data available

(e) germ cell mutagenicity; No data available

Component	CAS No	Test method	Test species	Study result
Butyl chloroformate	592-34-7	No data available	No data available	No data available

(f) carcinogenicity; No data available

Component	CAS No	Test method	Test species / Duration	Study result
Butyl chloroformate	592-34-7	No data available	No data available	No data available

There are no known carcinogenic chemicals in this product

Component	CAS No	IARC	NTP	ACGIH	OSHA	UK
Butyl chloroformate	592-34-7	Not listed	Not listed	Not listed	Not listed	Not listed

(g) reproductive toxicity; No data available

Component	CAS No	Test method	Test species / Duration	Study result
Butyl chloroformate	592-34-7	No data available	No data available	No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

**Target Organs** None known.

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(j) aspiration hazard; No data available

## Other Adverse Effects

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. 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.

Component	CAS No	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

## SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects Reacts with water so no ecotoxicity data for the substance is available.

Component	CAS No	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Butyl chloroformate	592-34-7	No data available	No data available	No data available	No data available

## Persistence and degradability

### Persistence

Soluble in water, Persistence is unlikely, based on information available.

### Degradability

Decomposes in contact with water.

### Degradation in sewage treatment plant

Decomposes in contact with water.

## Bioaccumulative potential

Bioaccumulation is unlikely; Product does not bioaccumulate due to reaction with water

## Mobility in soil

The product is water soluble, and may spread in water systems Decomposes in contact with water Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the environment. Highly mobile in soils.

## Ozone Depletion Potential

Component	CAS No	Ozone Depletion Potential
Butyl chloroformate	592-34-7	Not listed

Other adverse effects No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

## Waste treatment methods

### Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose in accordance with the Wastes Control Act (폐기물관리법).

### Contaminated Packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

### Other Information

Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms.

## SECTION 14: TRANSPORT INFORMATION



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## Road and Rail Transport

UN-No UN2743  
 Proper Shipping Name n-BUTYL CHLOROFORMATE  
 Hazard Class 6.1  
 Subsidiary Hazard Class 3, 8  
 Packing Group II

## IATA

UN-No UN2743  
 Proper Shipping Name n-BUTYL CHLOROFORMATE FORBIDDEN FOR IATA TRANSPORT  
 Hazard Class 6.1  
 Subsidiary Hazard Class 3, 8  
 Packing Group II

## IMDG/IMO

UN-No UN2743  
 Proper Shipping Name BUTYL CHLOROFORMATE  
 Hazard Class 6.1  
 Subsidiary Hazard Class 3, 8  
 Packing Group II  
 Marine Pollutant No hazards identified

Special Precautions for User No special precautions required

## SECTION 15: REGULATORY INFORMATION

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

Legend: X - Listed '-' - Not Listed

### International Inventories

Component	CAS No	KECL	TSCA	EINECS	IECSC	DSL	NDSL	PICCS	ENCS	ISHL	AICS
Butyl chloroformate	592-34-7	-	X	209-750-5	-	-	X	X	X	X	X

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

### Korean National Regulations

Component	CAS No	Act on Registration and Evaluation of Chemical Substances (K-REACH)	Authorised Chemicals	Existing Substances Subject to Registration
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

Component	CAS No	Chemical Control Act - Toxic Chemicals	Chemical Control Act - Prohibited Chemicals	Chemical Control Act - Use Restricted Chemicals
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

Component	CAS No	Chemical Control Act - Accident Precaution	Chemical Control Act - Accident Precaution	Chemical Control Act - Accident Precaution
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

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		Chemicals (% in mixtures)	Chemicals - Quantity limits Storage (% in mixtures)	Chemicals - Quantity limits Manufacture/Use (% in mixtures)
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

Component	CAS No	Waste Control Law	Ministry of Environment - CMR risk	Ministry of Environment - Critically Controlled Substance
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Harmful Agents Subject to Work Environment Monitoring	ISHA - Prohibited substances	ISHA - Substances requiring permission
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Substances subject to control	ISHA - Harmful Agents Requiring Health Examination	ISHA - Permissible Exposure Limits
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Subject to Process Safety Reports (minimum quantity)	ISHA - Threshold Limit Values (TLVs) Chemicals	ISHA - Special management materials
Butyl chloroformate	592-34-7	5000 kg	Not applicable	Not applicable

**National Fire Association - Dangerous Substances** Minimum quantity requiring a permit

Component	CAS No	Class 1 - Oxidising solids	Class 2 - Flammable solid	Class 3 - Spontaneously Combustible Substances and Dangerous Substances When Wet	Class 4 - Flammable liquids	Class 5 - Self-reactive substances	Class 6 - Oxidising liquids
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable	4. Group 2 Petroleum (Insoluble) 1000 L	Not applicable	Not applicable

## Control Parameters

Component	CAS No	Korea	ACGIH - Biological Exposure Indices
Butyl chloroformate	592-34-7	Not listed	Not listed

## US Management Information

OSHA - Occupational Safety and Health Administration

Not applicable

Component	CAS No	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Butyl chloroformate	592-34-7	Not applicable	Not applicable

**CERCLA** Not applicable

Component	CAS No	CERCLA Extremely Hazardous Substances RQs	Hazardous Substances RQs	SARA 313 - Threshold Values %
Butyl chloroformate	592-34-7	Not applicable	Not applicable	Not applicable

**GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

Danger.

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H226 - Flammable liquid and vapor. H302 - Harmful if swallowed. H330 - Fatal if inhaled. H314 - Causes severe skin burns and eye damage. EUH071 - Corrosive to the respiratory tract.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P310 - Immediately call a POISON CENTER or doctor/physician. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## SECTION 16: OTHER INFORMATION

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical 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

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

**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

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### Prepared By

Health, Safety and Environmental Department

### Creation Date

30-Nov-2010

### Revision Date

09-Jun-2024

### Revision Number

6

### Revision Summary

New emergency telephone response service provider.

**MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)**

Disclaimer

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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**